

# ★AMAZING STORIES

MARCH  
25 Cents



**Cities of Ardathia**  
By Francis Flagg

**The Light from Infinity**  
By L. A. Eshbach

**Other Science Fiction by:**  
Capt. S. P. Meek, U.S.A.  
J. Lewis Burt

## FREE 5-Tube Electric Radio Set

**SEND NO MONEY  
WE TRUST YOU  
SIMPLY SEND NAME  
AND ADDRESS**

Modern walnut cabinet, nearly 16 x 18 x 11 over all—Electro Dynamic Speaker—One dial control—Hairline electrics—Hand-graded steel chassis—Noise filter system—Security connection—Picks up distant stations as well as local stations.

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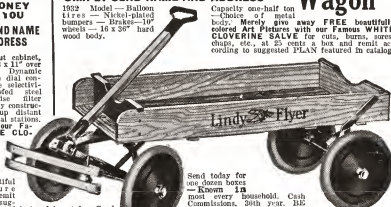
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**Department 87-MS**

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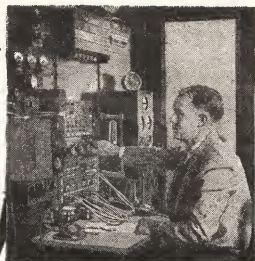
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**BIGGER PAY**

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**\$500 extra in 6 months**  
"In looking over my records I find I made \$500 from January to May in my spare time. My best week brought me \$107. I have only one regret regarding your course—I should have taken it long ago."

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If you are earning a penny less than \$50 a week, send for my book of information on the opportunities in Radio. It is free. Clip the coupon NOW. Why be satisfied with \$25, \$50 or \$40 a week for longer than the short time it takes to get ready for Radio?

**Radio's growth opening hundreds of \$50, \$75, \$100 a week jobs every year**

In about ten years Radio has grown from a \$2,000,000 to a \$1,000,000,000 industry. Over 800,000 jobs have been created. Hundreds more are being opened every year by its continued growth. Many men and young men with the right training—the kind of training I give you—are stepping into Radio at two and three times their former salaries.

**You have many jobs to choose from**

Broadcasting stations use engineers, operators, station managers and pay \$1,200 to \$5,000 a year. Manufacturers continually need testers, inspectors, foremen, engineers, service men, buyers, for jobs paying up to \$7,500 a year. Radio operators on ships enjoy life, see the world, with board and lodging free, and get good pay besides. Dealers and jobbers employ service men, salesmen, buyers, managers, and pay \$30 to \$100 a week. There are many other opportunities too. My book tells you about them.

**So many opportunities many N. R. I. men make \$200 to \$1,000 in spare time while learning**

The day you enroll with me I'll show you how to do 28 jobs, common in most every neighborhood, for spare time money. Throughout your course I send you information on servicing popular makes of sets. I give you the plans and ideas that are making \$200 to \$1,000 for hundreds of N. R. I. students in their spare time while studying. My course is famous as the course that pays for itself.

**Talking Movies, Television, Aircraft Radio included**

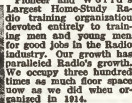
Special training in Talking Movies, Television and home Television experiments, Radio's use in Aviation, Servicing and Merchandising Sets, Broadcasting, Commercial and Ship Stations are included. I am so sure that I can train you satisfactorily that I will agree in writing to refund every penny of your tuition if you are not satisfied with my Lessons and Instruction Service upon completing.

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Get your copy today. It tells you where Radio's good jobs are, what they pay, tells you about my course, what others who have taken it are doing and making. Find out what Radio offers you, without the slightest obligation. **ACT NOW!**

**J. E. SMITH, President**  
National Radio Institute Dept. 2CS  
Washington, D. C.

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Pioneer and World's Largest Home-Study Radio training organization devoted entirely to training men and young men for good jobs in the Radio industry. Our growth has paralleled Radio's growth. We occupy three hundred times as much floor space now as we did when organized in 1914.



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Address.....

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JULES VERNE'S TOMBSTONE AT AMIENS  
PORTRAYING HIS IMMORTALITY

# AMAZING STORIES

## Scientific Fiction

Vol. 6

March, 1932

No. 12

### In Our Next Issue,

**MECHANOCRACY**, by Miles J. Breuer, M.D. Some psychologists and scientists who allow their imaginations to roam into the possible distant future, see things—remarkable things—to which they react with much misgiving. And it is small wonder, for machines that standardize production may in some ways extend themselves too far in standardizing life. It presents a problem worthy of serious consideration. Dr. Breuer presents this problem—which seems singularly *apropos* at this time—in a most vivid and absorbing manner.

**THE LOST MACHINE**, by John B. Harris. From the pen of an English author comes this story, that is "different," in the field of scientific fiction. The human reaction to the thinking machine (of the future) has been depicted, but now we have the other side—the machine's thoughts and reactions—or shall we say, reflexes?—to human endeavor.

**TROYANA**, by Capt. S. P. Meek, U. S. A. (A Serial in three parts) Part III. In the concluding chapters of this sequel to "The Drums of Tapajos," the author gives us, in deft strokes and concise form, the culmination of the concentrated experiences of the ancient races—legendary, to us, thus far—and of the two "intruders" from modern civilization. It is a fitting conclusion to an excellent story.

**SEVEN SUNSTROKES**, by Bob Olsen. An "apparently" normal death might easily be passed by a doctor as "natural," but when a number of similar deaths occur simultaneously, or at least close together, it might well be looked into. Investigation in this case, disclosed a number of amazing results, all of which our well-known author weaves into an amazing story par excellence.

And Other Unusual Scientific Fiction

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### Our Cover

This issue depicts a scene from the story entitled, "The Light from Infinity," by L. A. Eshbach, in which this man from Earth, in much increased proportions, is shown making his last desperate attempt at a gateway from the borders of enemy beings on another planet who are nefariously planning the Earth's complete destruction.

Cover illustration by Morey

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#### Take This Pleasant, Rapid Course

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### No Tricks or Stunts—You Learn From "Regular Music"

Yes, the new way teaches you to play from notes, just like the best musicians do. There are no trick "numbers," no "memory stunts." When you finish the U. S. School of Music course you can pick up any piece of regular printed music and understand it! Think what that means. You'll be able to read music, popular and classic, and play it from the notes. You'll acquire a lifelong ability to please your friends, amuse yourself, and, if you like, make money (musicians are highly paid for their pleasant work).

### The Surest Way to be Popular and Have a Good Time

Do you sit "on the sidelines" at a party? Are you out of it because you can't play? Many, many people are! It's the musician who claims attention. If you play, you are always in demand. Many invitations come to you. Amateur orchestras offer you wonderful afternoons and evenings. And you meet the kind of people you have always wanted to know.

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### How You Learn Any Instrument So Easily This Way

The amazing success of students who take the U. S. School course is largely due to a newly perfected method that makes reading and playing music almost as simple as reading aloud from a book. You simply can't go wrong. First you are told how a thing is done, then a picture shows you how, then you do it yourself and hear it. No private teacher could make it any clearer. The admirable lessons come to you by mail at regular intervals. They consist of complete printed instructions, diagrams, all the music you need, and music paper for writing out test exercises. And if anything comes up which is not entirely plain, you can write to your instructor and get a full, prompt, personal reply.

Whether you take up piano,

violin, 'cello, organ, saxophone, or any other instrument you find that every single thing you need to know is explained in detail. And the explanation is always practical. Little theory—plenty of accomplishment. That is why students of this course get ahead three times as fast as those who study old-time cloddish methods! Read some of the letters on this page and see for yourself! They don't guarantee that everyone can become a good player in three or four months; but they are written by people who didn't know any more about playing when they started the U. S. course than you do now. (Note that if you do know something about music now the U. S. School of Music grades you and instructs you accordingly.)

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Piano	Violin
Organ	Clarinet
Ukulele	Flute
Cello	Saxophone
Trombone	Harp
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Guitar	Cello
Hawaiian Steel Guitar	Sight Singing
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Drums and Toms	Automatic Finger Control
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Banjo (Plectrum	6-String or 7-String)
Junior's Piano Course	

### Send Now for the Free Book and Demonstration Lesson

The whole interesting story about the U. S. School course can not be told on this page. So a booklet has been printed—"Music Lessons in Your Own Home." You can have a copy absolutely free by the trouble of filling out the coupon below—and in the booklet you will find an offer that makes the U. S. course available to you at a very low price. With it will be sent a Free Demonstration Lesson which shows better than words how delightfully quick and easy this wonderful new method is. This booklet will also tell you all about the amazing new Automatic Finger Control. There is a good reason for this big reduction as you will see on reading the booklet, but since our offer makes the cost of the lessons average only a few cents a day, we want only people who are seriously interested to take advantage of it. If you are really anxious to become a good player on your favorite instrument, mail the coupon now—today. Instruments supplied when needed, cash or credit. U. S. School of Music, 663 Broadway, New York City.

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Address .....

City ..... State .....



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## Amazing New Facts About the Misunderstood Subject of Rejuvenation!

An extraordinary new book, based on certain discoveries about old age reveals facts which, to many men, will be amazing. Did you know that two-thirds of all men past middle age are said to have a certain seldom-mentioned disorder? Do you know the frequent cause of this decline in health?

### Common Old-Age Symptoms

Medical men know this condition as hypertrophy of the prostate gland. Science now reveals that this swollen gland—painless in itself—not only often cheats men of health, but also bears on the bladder and is often directly responsible for sciatica, backache, pains in the legs and feet, frequent nightly rising, and dizziness, denoting high blood pressure. When allowed to run on it is frequently the cause of the dreaded disease cystitis, a very severe bladder inflammation.

### 65% Have This Gland Disorder

Prostate trouble is now reached immediately by a new kind of home treatment—a new safe hygiene that goes directly to the gland itself, without drugs, medicines, massage, lessons, diet or the application of electricity. It is absolutely safe. 100,000 men have used it for restoring the prostate gland to normal functioning. The principle involved in this treatment is recommended by practically all physicians in America. Amazing recoveries are made in seven days. Another grateful

effect is usually the immediate disappearance of chronic constipation. Usually the entire body is toned up. Either you feel ten years younger in seven days or the treatment costs you nothing.

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If you have this gland trouble or if you have any of the symptoms mentioned above, you should not lose a day in writing for the scientist's free Book, "The Destroyer of Male Health." It will enable you to ask yourself certain frank questions that may reveal your true condition. Every man past 40 should make this test, as insidious prostate disorder often leads to surgery. This book is absolutely free, but mail coupon immediately, as the edition is limited. Address

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5551 Morris Avenue

Stuebenville, Ohio

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THE ELECTRO THERMAL COMPANY,  
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Name .....

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# The Beginning of Chemistry

By T. O'Connor Sloane, Ph.D.

**I**T is fair to say that the greatest triumph of knowledge, as acquired from the investigation of science workers, is certainty. This has been so completely realized by investigators, that the discovery of laws of nature, in so fully demonstrated a degree that they can be promulgated as complete and definite certainties, is a distinct triumph. We cannot trace much investigation of the constitution of the world for more than a little over twenty centuries. The Epicurean theory held that all matter was made up of minute, indivisible particles, which by myriads of chances were brought together and formed all sorts of compounds. These minute particles were taken as the smallest things that could exist and were very properly named atoms, which means indivisible things—or more literally, things which cannot be cut.

It is not going too far to say that this conception of the atom was as far as mankind got with natural science, in fifteen hundred years. The most curious things were believed, whose proof or disproof was a matter of the simplest experiment. To appeal to an experiment for truth seems to have been taken as a sort of insult to the intellect. The rate of falling of bodies was believed to vary with the weights, the heavier body being supposed to fall faster than the lighter. Galileo demonstrated the absurdity of this idea by dropping unequal weights from a high tower simultaneously. Large and small weights took substantially the same time to reach the ground.

Is it not a strange comment on the intelligence of man that many centuries elapsed before this simple experiment was tried? But worse is to come.

It is in chemistry that the strangest theorizing occurred. It was not until the end of the eighteenth century that chemistry took a great step in advance and began the work of building up modern chemistry on the basis of the first law of arithmetic—simple addition.

It had been known to the old-time chemists or alchemists that substances, especially metals, could be made to give quite different substances under various treatment. The critical thing, whose import the brightest of them never grasped, was that, whenever these changes took place, there was a change in weight, and that for the same change of substance, the change in weight was always the same. It seems incredible that they did not apply the chemist's great criterion, the balance, to find out just what was going on. If they found that a pound of lead heated in the air gave a yellow non-metallic substance weighing 1.07 pounds, and that this change in weight was always the same, it would seem most natural and easy to conclude that something weighing always .07 had been added to the lead. Every high-school child knows that the yellow substance is lead oxide, a combination of the metal, lead, and the gas, oxygen. But it

was only about a century and a half ago that the formation of oxides, by adding oxygen to metals, was discovered by Lavoisier and by Priestly. But what did their predecessors think was causing this change of weight?

It did not occur to them to go to their arithmetics for an answer, which was there, but they invented a most incomprehensible substance out of the resources of their intellect, to show that in chemistry two and two did not make four.

The substance which they invented they called phlogiston. It really would take far more space than is at our disposal to tell the many things which they thought phlogiston did. The original idea is traced quite far back to the seventeenth century. If a metal, such as lead or tin or mercury, was oxidized in the air, it was said the phlogiston escaped from it and the ash or calx as they called it (from the Latin) was left behind and this was in spite of the fact that the calx or ash always invariably weighed more than the original metal, involving a most absurd contradiction. If everything that was burned was a solid substance and produced another solid substance, it would seem that a very simple test by weighing would give them some clue to what is taking place, but the subject was complicated by the fact that when a candle burned or a lump of charcoal burned, there was little or no ash—there was nothing to show for it. They said that the wax of the candle and the lump of charcoal consisted mainly of the material of fire. Now, if an ash was reduced, it might be lead oxide reduced to metallic lead; they said that the phlogiston of the original basis of the ash, which was used in the reduction, went back into the metal. It is of little interest to follow out the absurdities of the phlogiston theory. It does make us feel that perhaps some of the very refined theories of the present day may be subject to extensive revision in the future.

When Lavoisier and Priestly found that red mercuric oxide weighed more than the metal, it was but a step to say that it was formed by oxygen combining with the mercury and the glory of these two chemists is based largely on this utterly simple and obvious conclusion.

It took some twenty centuries or more to make this discovery which is taken as the basis of chemistry.

The whole thing is extremely simple, a lot of theorizing has been done very successfully, but that is largely a question of nomenclature, as when we talk of the affinity of one thing for another. Once this preeminently simple fact was grasped, the natural thing was to go right down the line, weigh different substances, perhaps the most convenient the metals, combine them with oxygen and weigh the oxide—and the foundation stones of chemistry were laid. But it took a long while to do it, to demonstrate that the first elements of arithmetic held place in chemistry.

# The Cities of Ardathia

By Francis Flagg

Author of "Machine Men of Ardathia," "The Master Ants," etc.

*"HOPE springs eternal in the human breast" has been spoken many times as a light and logical proverb, but it also has depth. In these troublous times of economic stress and increasing mechanical supremacy, with no visible way of escape, the number of people who submissively hold on to mere shreds of life is legion—all because of the thinnest thread of hope, the hope which rises perpetually within them—the hope that the morrow will bring improvement. Perhaps this accounts, in part, for the reason that conditions are permitted to go from bad to worse for the vast majority. How much worse they can become is clearly set forth—scientifically deduced and plausibly shown—in this new gem by a favorite author of science fiction.*

Illustrated by MOREY

## Preface

ARDATHIA is not a myth. The illusion of time and the exigencies of authorship may place it in the past or in the future, but in reality its civilization parallels that of our own day and age. In the world's dim dawn, or in the world's dim future, however you may wish to phrase it, men built a great industrial machine, and that industrial machine posed a problem, and how that problem was solved—or not solved—is the subject of this story.

## CHAPTER I

DIESEL, president of the Council of Ten which ran the government of Ardathia, was being entertained at the palace of one of his colleagues. This palace, in the midst of a magnificent estate, lay outside the eternal pall of smoke and soot which hung over the city of Ironia. Yet straddling, as it did, a high ridge of land, and commanding from its wide verandahs a superb view of the Industrial City, it was possible for the Titan of Steel to overlook the mills and forges from which flowed some of the colossal wealth that gave him his tyrannical power. The name of this Steel Titan was Rocca. He was stout, red-faced, bewhiskered, with a false air of benevolence, an air of good will and fellowship, belied by the sharp, predatory gleam which came and went in his little red-rimmed eyes. Diesel, on the contrary, was tall, with a certain formal distinction of manner. Younger than his fellow ruler, he was none the less well

past middle age, clean shaven, save for a brief moustache, with greying hair and pale blue eyes of seeming honesty and candor. But it was the mouth of the man that gave a true index to his character. In repose it was a thin slit of cruelty not good to see, but it was seldom in repose, being slightly parted with an habitual smile which disguised its mean and ruthless quality. Both men were clad in the evening uniforms of their class, flowing togas covering under-dresses of exclusive purple. It was a warm evening in July and the windows giving on the verandahs and sloping terraced grounds were wide open. Servants in the black and gold liveries of their service went to and fro bearing cooling drinks, skillfully blended in tall frosted glasses. Rocca had eaten heartily, and now he drank in the same fashion; but Diesel, abstemious in his diet, had partaken of food sparingly and did not drink. One of the ladies present, slim, middle-aged, blond, wearing a frock whose simplicity accentuated the fabulous price it brought in a Fashion City half a world distant, puffed daintily at a scented nargila and remarked that she had no sympathy for the Unlings.

"Those Unlings down there," she waved a slim, henna-tipped hand towards the mills, "are so disgustingly dirty. I declare it makes me shudder to inspect an Industrial City—which I do as little as possible."

"Perhaps," said the man she addressed, a priest of Theo by his garb: "Perhaps," he said a little sadly,





*Having marked the position of the aerial flare burning redly on the highest point of the fortress tower, he dropped like a plummet until within a few yards of the flat landing-roof.*

"the dust and grime soaking into everything make strict cleanliness impossible."

"I'm sure," said a younger woman flippantly, (Rocca's motherless daughter just back from Ithuria), "that soap and water are cheap. If I were an Unling, my face and hands and clothes would be kept spotless no matter how poor I was."

The priest slightly shrugged his shoulders but made no audible reply, only his eyes cynically took in the immaculate toilets arrived at with the aid of wealth and tiring-maids. Rocca's daughter was a dream of loveliness in a priceless frock, with a string of creamy pearls at her ivory throat, her red-gold hair braided and wound around her shapely head like a blazing diadem. Ah, those stupid, arrogant rulers, those Purples! What did they know of reality, of life in Ironia on an Unling's pay?

Diesel took Rocca by the arm and drew him through one of the open windows. Out of the eternal cloud of smoke hanging over Ironia flames leapt into the heavens, lighting up the stacks and buildings and trestles and then dying away again. "I hear," said Diesel, "that you're having trouble in the mills."

Rocca chewed viciously at his unlit cheroot. "Yes," he said, "it's those confounded Equalizers. If I could lay my hands on them!" He crushed the cheroot in his fist and flung it over the railing. As if that were a signal, a dark figure stepped out of the nearby shrubbery below and advanced towards the verandah, staring up at the two toga-clad Titans. "Who's that?" demanded Rocca sharply, but his question was almost unnecessary, for the circle of light into which the stranger stepped revealed the tall, burly figure of a man dressed in the dark cotton smock and trousers and heavy leather boots of an Unling. His square face and well-modelled features, from which the grey eyes burned, made a splotch of discernible whiteness. The two rulers stared in amazement. An Unling! And in a Titan's garden! The thing was unbelievable. "There's nothing to be afraid of," said the intruder softly.

"We aren't afraid," retorted Diesel sharply. The man fumbled the heavy head-covering in his hands. "Don't you know," went on Diesel arrogantly, "that you've no business where you are, that it's a punishable crime for you to be outside an Industrial City? How you left your place I do not know, but be off with you, and back to it again before I have you handled!" The man straightened his shoulders with a jerk; broad shoulders, they were, and powerful.

"Listen, Titans, we are your slaves and we know it; but the work down there is so hard," he waved his hand towards the hell of smoke and flame, "and the wherewithal to buy food so little. Now you want to make that little still less. And you introduce the machines that rob us of our bread. How can we compete with mechanicals? So I have come from them—down there—to implore you to have mercy. For already, Titans, we are starving, dying. . . ." his voice wavered away.

Diesel regarded him dispassionately. "Why do you bring this problem to us? We are but two citizens of Ardathia, Unling, like to yourself. The Council decides what wages shall be paid, what food shall be dispensed to the hungry—and the Council reflects the will of the land. Appeal through the proper channels to the Council and not to us."

"But you *are* the Council," faltered the man; "you have the power. . . ."

"A power we must take care not to abuse," said Diesel smoothly. "And now, Unling, we have listened to you with more patience than your rebelliousness deserves. By approaching us in such a manner, by leaving your city and trespassing on a Titan's estate, you have violated the code. Go now, before we give you over to a just punishment."

But at the Titan's stern words, the man's humility fell from him like a cloak and his hand swung up in a minatory gesture that caused Rocca to recoil with a cry of fear.

"Fools!" cried the man, his voice still low and intense, "to harden your hearts to your own destruction! to think that we will starve in peace! Now by the name of Mola. . . ."

"Silence!" exclaimed Diesel, his mouth a thin slit; "silence, you dog! Do you dare? Ah, but you will suffer for this!"

The man turned and plunged into the shrubbery, down the terraced slopes, even as Rocca, frothing with rage, raised the whistle to his lips. Clear and sharp the thin note cut the heavy atmosphere. From far off came a mournful wailing, and near at hand the shrilling of alarms. The mechanical guards of the Titan's estate were moving with ponderous precision through the dark, the automatic gates closing. Attracted by the clamor, Rocca's daughter and guests poured out of the window. "What is it, father? What is it?" Rocca leaned over the verandah railing straining his eyes. "They'll get him," he prophesied, but his prophecy was wrong. For running swiftly, the man gained the great gates even as they closed with a heavy crash, even as the mechanical guards hemmed him in on all sides. Pausing, he himself raised a whistle to his lips. "What is that?" cried Diesel. Through the air piped two thin notes. The gates opened, the mechanicals withdrew, and the man ran through and on, for a half mile, until he came to where a small helicopter stood resting in a lonely place. On the verandah Rocca stamped his feet in a towering rage. "Damn it!" he shrieked, "my own private mechanical whistle. Some one will suffer for this. By Theo, this is some of those Equalizers' work!"

Diesel nodded coldly. "Their agent has gotten away; but some day we'll settle with the whole seditious brood for good. As for the Unlings, they are a menace to our rule. If only we could eliminate them entirely! But slowly and surely we are replacing them with automatic devices. Perhaps some day. . . ." he made a fateful gesture with his hand. Meanwhile, the man who had escaped the mechanicals by possessing the secret means of commanding them, had landed his helicopter at a secret spot in the city of Ironia and was making his way swiftly through the grimy streets. At a dark doorway he paused and gave a peculiar signal. The door swung open and he entered and descended a narrow staircase. To the Unlings admitting him he said not a word. The stairs terminated in a cellar, and in the floor of the cellar was a cunningly concealed trapdoor, which rose at the pressing of a secret spring. Descending a flight of short steps, he found himself in a well-lighted room where twelve men, clad much as himself, were seated around a large table. The men looked at him questioningly. The one at the head of the table nodded a curt greeting. In any gathering, he would have been an arresting figure. He had a large head with penetrating eyes. "Speak, Jan," he ordered.

"I did as the committee bade."

"And saw the Titans?"

"Yes."

"And they. . . ?"

"Refused to listen to the plea; treated me with contempt. If it had not been for the mechanical whistle. . . " he shrugged his shoulders.

"You have done well, Jan. We did not expect any different results from your visit; but it was imperative, because of the Unlings, that the attempt to soften the hearts of the Titans be made. Now we can tell them. . . " he paused and regarded the others. "Everything is understood, Companions of Equality?"

"Everything is understood."

"Then each one of us to his post. You, Ran, to Unida; you, Dacca, to San-an; and you, Rama. . . " Rapidly he gave his orders, and as each one received them, he saluted with an upraised gesture of the palm and quitted the room by means of the trap-door, until only Jan, and the leader of the Companions of Equality, Elan, were left remaining at the table. Long, they sat, and talked and planned, the youth urging, the chief hesitating; until at length the latter stood up with a gesture of surrender. "Very well. Do as you think best. Perhaps. . . " Then the two men turned out the lights and themselves quitted the chamber.

## CHAPTER II

**R**OCCA'S daughter we have already met in her father's palace. Her name was Thora, and she was almost as lovely as her name. Born and bred to the Purple, she had not the least conception of life outside of her own wealthy and privileged class. To her the Unlings were inferior beings, so many cattle who were the producers of their own misery and filth. She was not so cruel as ignorant. The suffering of millions of toiling Unlings moved her not at all; because this suffering was remote, unrealized, a part of the natural order of things.

Spinning through the air at a hundred miles an hour in her combination helicopter and sports plane, far outside the zone of traffic and of air-traffic protectors, she was annoyed when the big automatic glider slid gently alongside and made fast with grapples.

The day of air robbers and aerial bandits was past for a quarter of a century. The last great gang of sky-binders had long ago been incorporated into the traffic protector service, its leaders made members of the purple; in fact the Titan of Aeronautics had himself been a former sky-binder chieftain. So the daughter of Rocca was more angry than alarmed when she looked into the square face and grey eyes of the pilot of the glider. Despite the correct garb—he was dressed as a Pink—she knew him for an Unling by his big, coarse hands (no Pink ever soiled his hands with manual labor), and by the fact that when he spoke, it was in the Unling patois. "How dare you!" she cried. "What does this mean?"

"It means," said the Unling pleasantly, "that you're being kidnapped."

"Kidnaped! Are you crazy? My father. . . "

"Is not here," pointed out the Unling imperturbably.

She looked at him with blazing eyes. "Perhaps you don't know who I am?"

"Indeed I do. You are Thora, daughter of Rocca, Titan of Steel, and I. . . "

"And you?" she queried.

"Am one of your father's Unlings, born of an Unling, Jan by name, Companion of the Equalizers. . . "

Now Thora was no soft and timid damsel, despite her pampering. Or rather her pampering had not taken the form of sapping her physical strength and self-reliance. She had been taught to swim, box, run, fly; her body was as hard and supple as only a well-trained body can be; and now, faced with an emergency, she suddenly whipped out a small chute and would have gone overboard in the same moment if Jan had not grasped her swiftly with both his huge hands. Despite her struggles—and she struggled like a wildcat—she pinioned her wrists with a length of rope. Then he secured her feet and lifted her bodily from the sports plane to his own glider. All this time the two airships had soared along on even flight, balanced by the automatic gyroscopes. Working with swift deliberation, Jan cut from the girl most of her leather flying jacket, tore the jeweled buckles from her shoes, the gold clasps from her tunic, despoiled the fingers of their two distinctive rings, and laid them in a heap. "Thief!" spat the girl. Unheeding her epithet, he now opened a bag and took from it—of all gruesome things—a skeleton in several pieces. The cavernous skull, the naked bones, caused the girl involuntarily to shrink. Jan smiled. "You see, Thora," he said softly, "that I place this skeleton, portions of your clothes, the jewelry, aboard your flyer—so—and I throw loose the grapples—so—and before loosing it, I set fire to your craft—so—" he suited the action to his words and the girl watched wide-eyed as her plane dropped away from them with its grisly freight, trailing smoke. "What good will that do you?" she demanded. "My father will hunt you down and you will hang. . . " Jan busied himself with his controls. "I see," he said, still softly, "that you don't quite understand. In a few minutes that fire will reach the fuel tank and your craft will go hurtling to earth a flaming mass. Then today, or tomorrow, or the next day—it hardly matters when—your father's searchers will find the charred remnants of your flyer, a few of your bones and your jewelry. . . "

"You fiend!" shrieked the girl.

"Ah, you are beginning to comprehend! What is more natural than an accident in the air, death in the wreck? No! Your father will look no further." He shook his head. The glider hurtled on. Terrified at last, deathly afraid of the future, the girl sank back, half swooning. At last they came to earth on the site of an old flying field. With the coming of the helicopter device, which made direct rising a possibility, such fields had fallen into disuse, been converted to other purposes, or merely abandoned. This was one of the latter, situated in a lonely place. The increasing use of synthetic compounds for the manufacture of foodstuffs had depopulated the countryside and concentrated more and more of the people into Industrial Cities. Forlornly scattered over the landscape were farmhouses and out-buildings gradually sagging into decay. Inhabitants of a sort there still were, but few and far between. On this abandoned flying field, then, in the midst of such depressing surroundings, the glider landed. Picking up the girl in his arms, Jan carried her into a deserted dwelling. The dwelling had evidently been deserted for a long time. Dust and cobwebs hung everywhere, the floors were thick with dust, and what scanty furniture re-



mained was warped and cracked. Down a dark flight of steps into the cellar of this dreary dwelling went Jan, and the girl in his arms began to scream and to writhe with fear. He shook her forcibly. "Be quiet," he said. "I'm not going to murder you." Under the pressure of his hand, a seemingly solid section of wall masonry fell away as if on a pivot and he entered a dark tunnel, the ingeniously contrived door closing behind him. His feet rang hollowly on concrete paving until he came to another, this time a wooden door, which he pushed open and so stepped with his captive into a vast underground chamber or crypt, well lighted and ventilated. "One of the secret places of the Equalizers," said Jan. The girl stared around her fearfully. The room was an arsenal of weapons, tools and books. From a map over which he was poring, a man looked up, revealing the striking head and clear, penetrating eyes of Elan, the Equalizer Chieftain. Jan saluted with a half-raised gesture of the palm. "Who is this maiden?" demanded the Chieftain.

"Thora, daughter of the Titan Rocca."

"Then you were successful?"

"Yes."

The Chieftain eyed Thora broodingly and shook his head.

"Jan, Jan, I haven't much faith in this plan you have persuaded me to against my will. And yet," he said musingly, "there is some logic to it."

The girl cried entreatingly: "If you are this man's master, tell him to let me go. I swear my father will richly reward both of you if I am released at once."

Elan made no reply, but pointed towards a door leading to another room. "Have her change," he commanded briefly.

The other room was comparatively small, fitted up as a sleeping chamber. Jan removed the cords from Thora's wrists and ankles and indicated a pile of coarse clothing. "You will remove your own garments—everything, remember!—and don these." The girl stared at him proudly, her whole attitude one of resistance and defiance. He took out his timer and glanced at it. "I shall be gone exactly ten minutes. If you haven't made the change by the time I return—discarding every single garment you are now wearing, remember—I shall make the change for you." He went out, closing the door after him and for a moment the girl stood motionless. Then like a trapped animal, she darted this way and that, examining the walls, seeking a way of escape, but save by the door she had entered, exit there was none. An alcove to the rear of the chamber, and shut away from it by a heavy curtain, proved to be nothing but a bathroom. Slowly, reluctantly, she turned her attention to the coarse clothes, and then, intimidated by Jan's threat, began to strip. When he returned at the expiration of the ten minutes, she faced him, clad in the cotton garments, her own leather skirt and leggings, and intimate things of priceless silk lying heaped on the floor. "It is well," he said. "Follow me." She walked stiffly, the unaccustomed coarse clothing torturing her sensitive skin, the heavy leather boots dragging at her feet. Despite her pride she wanted to weep, and it was only with an effort she held back the tears from her stormy blue eyes. Elan looked up from poring over his map.

"Thora," he said kindly enough, "from us you need fear no personal violence or outrage, beyond what is absolutely needed to re-establish your status in life. As

you doubtless know, we are in a conspiracy to overthrow the rule of the Titans; that is, of your father and the Purples. It is in our minds to send you to toil in an Industrial City, so that in event of our rebellion failing you will know, by actual experience, of the Unlings' trials and sufferings, will use your influence with your father for more merciful conditions, will be merciful yourself should you ever come to power."

"I will use my power," declared the girl passionately, "to have you all hunted down, hanged!"

Elan's face did not change expression. "So you think now, but later. . . . At any rate, we are sending you to your father's Industrial City of Ferno, where you will toil as one of your father's Unlings, wearing out body and soul for the profit of no one but your father! where—"

"Where I will denounce you to the authorities!" cried the girl.

"Poor child," said the Chief of the Equalizers a little sadly, "she doesn't know where it she is going!"

"Nor realize the soulless cruelty of a hell of steel and stone," said Jan.

"I will denounce you to the authorities!" babbled the girl wildly. "Nothing will prevent me from denouncing you to the authorities!"

"Nothing will," said Elan gravely; and to Jan, "Take her away."

### CHAPTER III

**I**N the half darkness something loomed, something that seemed implacable, monstrous. It was oddly like a gigantic human head thrust forward from a squat body. Bulbous it was and cavernous, the head of a sphinx on the body of a beast. From it breathed a visible aura of radiant light. Ventar went to and fro, talking to his monster, crooning to it, serving it with his skillful hands. Far underground was his secret laboratory, in the heart of Ironia it lay, and none of the Equalizers save Elan knew of its existence.

Ventar was an Unling of perhaps forty years of age, skilled as a mechanic (indeed he worked regularly in the mills), small and colorless. With nothing but his burning eyes to mark him apart from thousands of other Unlings—that, and his obsession—he was none the less the possessor of that colossal intellect which enthroned the machine. Force of circumstances swept him into the ranks of the Equalizers. Elan, it was, who recognized in him the great scientist and inventor, who secretly built for him this workshop and encouraged him to experiment and to strive and realize his vision in concrete iron and steel. So for ten long years Ventar worked and wept, in alternate explosions of hope and despair, stealing away from the drudgery of his daily work to become intoxicated with his own genius, caring for nothing else, absorbed, enthralled, until now he turned from putting the final touches to the thing he had created—the thing that pulsed like a sentient head—and faced the small group of men who stared at the looming monster with fascinated eyes. These men represented the executive committee of the Equalizers. Blindfolded, Elan had brought them to the laboratory; somewhere in Ironia, they knew, but that was all. With the rapt enthusiasm of a dreamer, a fanatic, Ventar spoke, his words pouring forth in a tumultuous stream.

"It is finished," he cried, "finished! Look at it and

marvel! Nothing like it has ever been made before! You have heard of machines that could answer questions and tell the tides of the sea for twenty years in the future. You have heard of others that could best the minds of men in abstruse calculations. In our Industrial Cities are thousands of such automatic devices. But you have never heard before of a *mind* for the machine!"

He paused for a pregnant moment. The silence was intense.

"A mind for the machine! Look at it there! I call it," almost whispered Ventar, "the Mechanical Brain."

The Mechanical Brain! Fateful words. None realized how fateful.

"It is an intelligence for the machine. Let me demonstrate my meaning." He approached the monstrous "head" and lifted a metal flap that hung down like a huge ear-lobe. "See! I whisper to it my command. I tell it to make the mechanical behind you advance and circle the room. Behold!" There was the grinding of gears, a harsh clattering of metal, and the unwieldy mechanical marched forward, circled the room and returned to its place. "Nor is that all! Look at this model defense tower I built, with three decks of automatic iron shooters aimed at those toy Pinks. Now!" He whispered again in the ear of the brooding head and the row of toy Pinks went down under a leaden hail. In a hundred ways, to the overwhelming astonishment of the gathered men, Ventar demonstrated his uncanny invention. "The Mechanical Brain can control any mechanical device with which its 'thot,' its 'will' is in attunement. Over automatic machinery it is supreme."

"But of what use is it to us?"

The man who asked this question leaned forward, his long, pointed face white under a thatch of dark hair. It was Elan who stood up and answered. "Companions of Equality, for long years we have plotted the overthrow of the Titans. It is wars that arm the Unlings. But the Titans have grown wise and no longer send the Unlings to war. Moreover, deprived of the right to bear or own arms, the Unlings are defenceless before the tyranny of the Purples. Our rulers have concentrated all the means of destruction in their own hands. The airships that dominate the Industrial Cities from the air, the mechanicals of war, the street towers with their triple decks of iron shooters and gas sprayers—all in their possession, and all operated by the Pinks from central fortresses. Against such concentration of destructive might, what chance have the Equalizers of leading the Unlings in a successful uprising? None at all! That is why I have always cautioned against premature rebellion, have held in restraint those hot-heads who would have dashed us to bloody defeat against the granite rock of Titanism. But at last our hour has struck. . . . the hour for which unknown to you I have planned and waited. There!" cried Elan, rising to his full height and pointing dramatically at the Mechanical Brain, "There is the weapon with which we shall strike! Against the mechanical might of the Titans we shall oppose the 'will' of the machine—*our* will!" He paused breathless. The Companions rose to their feet in a surge. Only Jan remained calm, unexcited. "We do not understand! What do you mean?"

"I mean," said Elan, once more his cool, collected self, "that by means of the Mechanical Brain we shall control the machines of the Purples, render them useless, turn them against our oppressors."

"But how, how?"

"Let Ventar explain. Speak, Ventar!"

All eyes turned to the hitherto insignificant inventor—insignificant until this night to the most of them—now suddenly endowed with all the awfulness and potentialities of a Jove. He leaned against the base of his incredible creation, the radiant light pulsing out and around him, until he looked like some mythical demon from Hades. "It is simple enough," he said. "Whatever commands are given my Mechanical Brain, those commands will it enforce on the mechanism with which it is in attunement."

"But is your 'brain' in attunement with the automatic machines of the Titans?"

"Not yet. But by means of this little device. . . ." He produced a metal contrivance, scarcely more than an inch in circumference, seemingly a round, flat disk, and passed it to one of the Companions.

"Drop that into the operating cavity of any automatic machine and it will receive the commands of the Mechanical Brain and carry them out. The 'will' of the Mechanical Brain will negative any wireless or electrical control the Pinks may seek to exert."

The men passed the disk from hand to hand and examined it with awe. "But who will place them?" at last questioned one.

Ventar shrugged his shoulders indifferently. "That is up to you. I have made the brain; I furnish you with the disks. My part is done."

"Companions," said Elan, silencing the group with uplifted hand, "the placing of those disks will be the duty of every Equalizer, and of every trusted Unling. Each of you was brought here so that you might realize what possibilities lie in Ventar's invention, understand the urgent need for action, expedition, secrecy. You will go to your separate posts and become centers of distribution for given districts. When the task is done thoroughly, when every mechanical of the Titans is in attunement with our Mechanical Brain; then, then. . . ."

"Then," breathed the man with the pointed face.

"Then will our hour of victory strike!"

## CHAPTER IV

**R**OCCA, Titan of Steel, came to the meeting of the Council of Ten in the beautiful capital city, Cosmola, with a heavy heart.

But twelve hours had elapsed since the burial of the few pitiful bones that had been salvaged from the charred wreck of his daughter's flyer. The supposed remains of Thora, the lovely, had been laid to rest with all the pomp and pageantry attending a funeral of a Titan princess. Iron shooters had thundered; automatic bombing ships had soared in formation, trailing mourning banners of costly silk; regiments of pampered Pinks had paraded, and hundreds of Purples had scattered thousands of gorgeous blooms over the great marble slab that presumably sealed her in her tomb.

But though the Titan's heart was heavy (for Thora was his only and much loved child), and though sorrow had eaten lines into his falsely benevolent face, he responded without hesitation to the emergency summons from the capital. Death might lay low his nearest and dearest, grief might be a canker in his bosom, but none the less the old tyrant would rush eagerly to the exercise of his autocratic power.

From the landing platform on the roof, he hurried by automatic lift to the great council hall where he found Diesel and the other eight members of the governing body assembled. With them was Greco, a tall, dour man, chief of the Pink Secret Service, himself a Purple. Diesel addressed Rocca. "Greco has begged us to foregather in full council as he has something important to communicate to the government."

"Titans," said Greco respectfully, "I have to report the discovery of a serious plot against the peace and safety of Ardathia; a plot so serious and far-reaching that I deemed it better to bring it to your attention at once, than to assume the sole responsibility of dealing with it myself."

Since the redoubtable Secret Service Chief usually considered himself capable of dealing with any situation single-handed, the Titans looked grave. "What is the nature of this plot?"

"With your permission I will introduce the man who discovered it and who can speak of it better than I."

"Very well; let him be brought in."

There entered a man in the garb of the Pinks, a tall, good-looking fellow with a long, pointed face and a thatch of dark hair. He bowed deeply and stood respectfully at attention. "Speak," said Greco; "tell the Titans what you told me."

The man began with trained precision. "My name is Dolna; I have been a Pink special for ten years. As an Unling I have worked in various Industrial Cities, worming my way into the ranks of the Equalizers, until now I am Director of a district." He paused.

"Well?" queried Diesel.

"The other night I attended a meeting of the leaders of the Companions of Equality. Elan was there, and Jan. The meeting was held in a secret laboratory I had never heard of before, somewhere in Ironia, I do not know where. We were taken to it blindfolded, fourteen of us." Again he paused for a moment. "In that secret laboratory an Unling named Ventar, a mechanical genius, had fashioned a great machine, what he called a Mechanical Brain."

"Mechanical Brain!"

"Yes."

"For what purpose?"

"For the overthrow of the government of Ardathia." Diesel shrugged his shoulders and Rocca and his associates smiled scornfully. "What foolishness is this, Greco?" demanded the former.

"Wait," said Greco softly. "Let Dolna finish."

"Very well—but be brief."

"By having the Mechanical Brain control the armed mechanical forces of the country," said Dolna.

"What!" The Titans stared at him as if they thought he had taken leave of his senses.

"Yes. Ventar gave a marvelous demonstration of his invention. He proved that it could control any automatic mechanism it was commanded to control and with which it was in attunement."

A chorus of exclamations came from the Titans. "Absurd! Impossible! The thing was a trick!"

"No," said Dolna patiently, "not a trick." He went on to explain at length what he had witnessed the Mechanical Brain do. "And if the Equalizers are willing to gamble their lives on the functioning of it," he wound up, "can the government of Ardathia afford not to take it seriously?"

Diesel walked the length of the room and back. "But how can this Mechanical Brain get into attunement with our automatic mechanicals?"

"Through these," Dolna dropped several metal disks into his palm.

"Through these?"

"Yes. One of them placed in the operating cavity of a mechanical makes it amenable to the Mechanical Brain. Oh, I beg of you not to doubt this, for I saw it amply demonstrated! And," went on Dolna less impetuously, seeing that he had riveted attention, "even at this very moment the disks are being broadcast—everywhere."

Now at last he had aroused them to the seriousness of the situation. "By Mola!" roared Rocca. "Greco, what is your Secret Service for? Place this Elan and his criminals under arrest at once!"

Greco smiled wryly. "For twenty years we have been trying to place our hands on Elan, but he comes and goes like a phantom. Besides, as you know, our policy these latter years, has been to ignore the activities of the Equalizers somewhat, to allow their existence as a safety-valve. . . ."

Diesel interrupted him. "Enough, enough! Let the Pinks be mobilized at once," he cried, "all automatic defense mechanicals examined, guarded!"

"If it please the Titans," said Dolna respectfully, "I have a plan to propose."

"Speak! What is it?"

"Do not interfere with the distribution of the disks."

"Are you mad!"

"No, listen. Don't you see that this is the opportunity you have longed for? Confident of victory, the Equalizers will come out into the open, put themselves at the head of the Unlings, reveal who they are and their secret hiding places. That is, they will if they are not alarmed, if they think you suspect nothing. And then," said Dolna deliberately. "You can turn your armed automatics against them, wipe out the Equalizers, crush the Unlings, deplete their numbers. . . ." He paused. "By Theo!" muttered Diesel, "there is something in what you say." The Titans leaned forward with tense faces. "But how, how?"

"By kidnaping Ventar. Listen, Titans, only Ventar knows how to operate the Mechanical Brain. He is jealous of his secret and trusts no one. His ruling passion is to be let alone, to dream, to invent. I am positive that he cares nothing for the Equalizers save that they give him the means to work in a laboratory. Capture him, bribe him with offers of facilities for research and experiment on a vast scale, graft to his body the Pledge of the Secret Service, and then loose him to whisper your commands to the Mechanical Brain instead of the commands of the Equalizers. *Your* commands," repeated Dolna. "Do you realize what that means? It means. . . ."

Rocca surged to his feet with an oath. "Dolna," he cried, "capture this Ventar, make it possible to carry out this plan successfully, and I swear by the word of a Titan that Ardathia shall not forget this service, that the robe of a Purple is yours!"

Dolna had expected to be rewarded, but not so highly. His cheeks flushed, his eyes sparkled, yet he said hypocritically: "Thanks, mighty Titan, but I have done this not for my own advancement, but for the good of. . . ."

"I know, I know," interrupted Diesel; "but only cap-



ture Ventar and you shall receive what Rocca promised."

"To hear," said Dolna bowing, "is to obey. Already Ventar is captured."

"What!"

"He is in this building."

"But how . . . when . . ."

"You forget that he thought me an Equalizer. It was easy to take him without arousing suspicion. He is held in the Question Room."

"You have done well. Have him brought. . . . But wait. It is better that he be interrogated in the proper place; let us go to him."

## CHAPTER V

THE Question Room of the Pinks, the interrogation chamber of the Secret Service, was large and gloomy—with deliberate design. Nightmare instruments of torture, devices that crushed, pinched, flayed and racked stood in gruesome rows. Other instruments of a more inscrutable nature occupied one end of the room. In this intimidating place Ventar faced the Council of Ten and its two henchmen. His dark eyes flashed fear and resentment. "Unling," said Greco coldly, "everything is known. You are an Equalizer taken in a red-handed plot against the rule of Titanism and the peace and security of Ardathia. As such you deserve nothing but death—the molten death," he added significantly. Ventar blanched. "But if you make full confession of the plot, perhaps your life will be spared you."

"And if I refuse?"

"Then you shall be tortured until you do."

"Very well," said Ventar sullenly.

"Your name is Ventar?"

"Yes."

"An Unling of Ironia?"

"I am."

"And up until now you have been a member of the Equalizers?"

"I have been."

"And for the violent and unlawful purposes of that organization you invented what is called a Mechanical Brain?"

The question caused Ventar to stiffen convulsively, to forget his fear. "Yes," he cried passionately, "a Mechanical Brain! But listen, Titans, what did I care for you or the Equalizers? Nothing—less than nothing! I was your Unling and toiled in your factories and mills, and all I wanted were the tools, the equipment to express my dream, my vision, to create without hindrance! But an Unling must not think, he must not own tools, and in your mills he must do nothing but the tasks given him to do. So I revolted—I joined the Equalizers. Elan made it possible for me to have a laboratory, to build the 'brain'!" He stopped, breathless; and in the long pause that followed his outbreak, he muttered again: "What do I care for any of you? Nothing—less than nothing!" Diesel studied him thoughtfully, the dark, blazing eyes, the weak, stubborn mouth; then in an aside to Greco: "Take him to the mental-tests department and have a reading made of his character. At once!" During Ventar's absence, the Titans discussed every phase of the proposed plan. At the expiration of twenty minutes Diesel glanced at the paper handed him and passed it to the others. "It is as we expected. Bring

back the Unling," Ventar entered, his roughly made cotton garments in glaring contrast to the rich dress of the rulers.

"Unling," said Diesel sternly, "contrary to the law of Ardathia, which decrees that you should be put to death, we have decided to grant you life." Ventar's face lighted up. "But only if you faithfully repair the mischief you have sought to do us." His face fell again. "Listen, Unling, we are sending you back to Ironia, back among your companions . . ." (Ventar stared incredulously) . . . "but in *our* service."

"What do you mean?"

"That you will mix again with the Equalizers as if nothing had happened, and at the appointed time whisper *our* commands to your Mechanical Brain instead of the commands of the Equalizers."

Ventar laughed raucously. "Ho, ho! and how do you know I shall keep faith and not betray you?"

Diesel smiled grimly. "Tell him, Greco."

"Because," said Greco blandly, "before you go back you will be pledged to the Secret Service. That means that a small metal capsule containing a minute but very efficient quantity of explosive chemical will be grafted into a certain part of your body. If at any time you seek to tamper with this capsule the fact will register on a control machine in this building, a certain wire—less ray be released, and yourself blown up!"

Ventar blinked.

"And more than this," went on Greco inexorably, "if we have reason to expect that you are betraying us, then we shall release the ray anyway and blow up, not only you but everything around you—your precious machine, if you are near it!"

"But, of course," broke in Diesel smoothly, "you will keep faith. For listen, Unling, to what will be your reward if you serve successfully. What Elan furnished you will be nothing to what we shall furnish. All the resources of Ardathia will be placed at your disposal for research work. A hundred thousand dernos will be your personal income a year. The finest laboratory. . . ."

"Enough!" cried Ventar, his eyes blazing. "You can depend on me. Why should I risk this god-like genius of mine being killed? Understand! I care nothing for either you or the Equalizers—you could cut each other's throats for all I cared—but for the things I want to invent, develop—Ah! for these I do care; and for their sake. . . ."

"He is our creature," said Diesel in an aside to Greco. "Pledge him to the Service and send him back."

## CHAPTER VI

DAY and night the machines pounded and stamped and wove and spun and melted, and day and night, in twelve-hour shifts, stripped to the waist and grimed with sweat and smoke, the Unlings leaped and ran and heaved and lifted, and red flames licked and scalding steam gushed. From the smoky sky soot fell in persistent showers. The broad, colorless streets ran this way and that, dominated by mechanical towers, the houses leaned one against another in decrepit weariness. Nothing of beauty, nothing of fresh greenness greeted the eye. The few trees that stood fringing the streets were stunted in growth, their leaves listless and gray. But the Unlings hardly noticed. In the course of their drab overworked lives they had known nothing dif-

ferent. The children half-naked and gaunt, playing in vociferous groups, were used to such surroundings. Only to Thora, the Unling, she who had once been Thora the lovely, princess of Titanism, proud member of the Purple, was the Industrial City of Ferno a nightmare of horror. She had come to it, she hardly knew how, in devious ways known but to the Equalizers. Cruel clippers had shorn from her shapely head the golden locks, an acid had washed the henna stain from her finger-tips, had roughened the palms, and as for the rest, a few hours of the grime and dust of the city had darkened the fair skin of face and hands. With loathing she regarded the house to which Jan brought her. Never had she dreamed of living in such a squalid place. It was (to her) like the den of unclean beasts; and yet, if she had noticed, she would have discerned pitiful attempts at cleanliness, attempts daily made, and daily futile in the face of glowering mills and abject poverty. But she did not notice. All she saw the first night was the mean room into which she was introduced, and the gaunt, spiritless-looking woman with the fretful child in her arms. "This," said Jan with a wave of the hand, "is your new home. And this," he said, indicating the woman, "is Freeta." Freeta smiled wanly, but Thora only laughingly stared.

"See," said Jan to Thora conversationally, and laying a light finger on the bony arm of Freeta, "see how well-nourished and fat Freeta is! Look at her firm, rosy cheeks and bright eyes!"

The woman averted her thin face.

"And the child," went on Jan ruthlessly. "You mustn't get the idea it is crying for lack of something to eat. Oh, no! mother and child are well and strong. The mother gets her health from long years of toiling in the mills, from eating the luxurious food of an Unling, and the child from its pleasant surroundings and rich, creamy milk."

Thora stared at him insolently. "I wish," she said, "that you would cease talking to me and go away."

"And this," said Jan imperturbably, speaking to the woman, Freeta, and indicating the daughter of Rocca, "is Thora the Unling who for a brief while was . . ." he raised his eyebrows significantly.

"What do you mean?" demanded Thora furiously.

"I mean," said Jan, "that a woman of the Unlings, finding favor in the eyes of a ruling Purple, his favorite for a few years and then repudiated and cast off by him, must now forget her airs and graces and return humbly to the class from which she sprang." And in an undertone she alone could hear, "That is what they will think you are (there have been many such), so dismiss any wild ideas you may have of disclosing your identity; you will merely be laughed to scorn, if you do."

He went away then, and left her sitting straight and motionless on a rickety chair; and even his going filled her with terror, seemed to snap the last link connecting her to her own past. She half opened her mouth to scream, to call on his name, to implore him to return and not leave her alone in this desolate place, but pride fought down the impulse. The woman, Freeta, looked at her sorrowfully, spoke in the rough patois half unintelligible to Thora's ears. "It is hard," she said timidly, "after having known better, to return here. Once," she said, "a long time ago, when I was young (she couldn't have been more than twenty-five, though she looked

forty), "before I married, I served as a spoungirl in the mansion of a Pink in a Flower City." She shook her head sadly. "It was like paradise," she said.

The woman was pitying her! And because she thought her the discarded mistress of a Purple! The indignant color flamed into Thora's cheeks, pride straightened her bowed head. "How dare you!" she cried furiously, "how dare you! Oh, I will have you handled for this! I'll . . ." And then conscious of the futility of her words, she ceased abruptly and began to weep. The other woman was not offended. Jan had selected her home in which to place Thora because she was kind-hearted and understanding. "Poor thing," murmured Freeta compassionately.

In the little cubbyhole that she learned was her own bedchamber, stretched on the coarse ticking of the narrow bed, Thora continued to weep hysterically. She wept because the stiff, cheap cotton chafed the skin, because the heavy, ungainly boots made her feet ache, because she was homesick and desolate and afraid of the future. And she wept because she was tired and hungry, having started her flight that morning with only a light repast of fruit and bread. Jan had twice offered her food, but she refused to partake of it. Now late at night she was weak and spent. Several times during the night she heard the wailing of the child, but at length, tired out, she must have slept, for suddenly it was morning, and in the outer room sounded the heavy stamping of feet, the hoarse rumble of a man's voice. A little terrified she got up and wearily put on her boots. Unused to sleeping in her clothes, she felt unrested and frowsy, and of toilet facilities in her room there were none. Visions of her own palatial apartments in the luxurious palace overlooking Ironia, of soft-voiced tiring-maids coming at her call, of scented bathing water and salts, overwhelmed her and she sat down with a sob. But after all, Thora had the resilience of youth, some of its divine optimism, and on reflection, it seemed impossible that she could be kept indefinitely a prisoner in her father's own Industrial City. Only the woman and the child were in the bleak living-room. "You can wash there," said the woman, pointing to a rusty sink and faucet. The smell of cheap soap sickened Thora, and she dried her face and hands gingerly on the proffered piece of cloth. "That's your breakfast on the table." Never had Thora seen such food before: a bowl of shredded flakes, a loaf of heavy black bread, and a pot on the stove of some brown liquid steaming hot. But she was undeniably hungry, and after she had declared she couldn't eat it and the woman had answered that there was nothing else, she managed to soak some of the bread in the hot liquid and make a meal. The child, a baby of about eighteen months, wailed drearily, monotonously. "What's the matter with it?" asked Thora kindly enough. Direct suffering aroused her ready sympathies. "He's hungry," said the mother.

"Well, why don't you feed him, then?"

"The coarse food upsets his stomach, and these" (she laid her hand on her withered breasts) "are dried up."

"But why don't you buy him milk?"

"Milk is ten zimes a quart—and we haven't the money very often. My husband," said the woman tonelessly, "only makes ten zimes a day in the mills."

Ten zimes a day! Why a hundred times ten zimes wouldn't pay for one of the meals in her father's palace! Thora turned away silently. No attempt was made to

stop her from leaving the house. Once in the crooked streets the idea of freedom flamed up in her bosom. In a vague way she knew how Industrial Cities were governed. A central body of Pinks, relieved at stated intervals, garrisoned the places, and the Scholar Men, a class of officials between the Pinks and the Purples, functioned in the mills as engineers and managers. None of them had their homes in the Industrial Cities. They dwelt in Flower Cities, twenty, sometimes a hundred miles away and planned to work. Save for the private helicopters and plane-flyers of the various persons enumerated above, all freight and supplies entered and left the cities by means of freight-gliders automatically controlled and propelled. They received power for their engines from radial depots strategically located throughout the land, as indeed did the majority of privately used planes and helicopters. This, of course, laid down definite routes of travel for such craft and only a relatively few people of the privileged classes used the old-fashioned oil-driven helicopters and sports-flyers for aerial flight off the beaten paths. Thora thought of all this. Surely, she concluded, she could appeal to either the Pinks or the Scholar Men for protection and succor. For wasn't she on her father's property and these her father's men? But what she failed to realize were the actual conditions within the Industrial City of Ferno. The Pinks seldom or never policed the streets, but every two blocks they were commanded by armed towers from which pointed the muzzles of automatic iron shooters in three decks, and poison gas devices for spraying gas. From the security of what was practically their fortress, a towering building of steel and stone, the Pinks controlled the use of these weapons through three different systems of contact—telephone, wireless, and direct electrical current. Day and night, under the menace of these defense towers, the Unlings came and went, and though they might grumble at the tyranny of the Titans, curse their hideous lot and shake fists of hatred, none the less they dared do no more; for they had risen once—and the memory of that once sufficed to keep them in toiling subjection.

Past the armored towers, past the children in the gutters, the drab women and men lounging on sidewalks and in doorways, she hastened, until she came to the stone wall around the garrison-fortress of the Pink police. But the great gate was barred and the high walls devoid of any sign of life or activity. In vain she shouted and hammered. At last she turned away in despair, and had gone some distance with dragging feet when, rounding a corner, she almost bumped into a swiftly moving figure. The leather cap, the close-fitting black shirt on which gleamed the orange-colored wings of the Pink Police Service, apprised her of the fact that here was not merely a member of the Pinks, but an officer of rank. She did not realize with what rarity one was to be met with in such fashion. But Bolan, commanding officer of the guard, big and burly, with sunny blue eyes and a cruel, sensuous mouth, had his own private reasons for being where he was. Even in the Industrial City of Ferno, where youth and beauty so early withered, some of the maids of the Unlings were fair to look upon, and to many of them his attentions were the condescensions of a god, a superior being, and his gifts the only taste of luxury they ever had. So he caught the eager girl by both arms, as she almost flung herself into his embrace. "Help, Lootna," she panted, calling him by his

title. "Help, help!"

"Gladly, little one."

"My name is Thora."

"A pretty name!"

"I am the daughter of the Titan Rocca."

"Say rather, his mistress!"

"Sir!" cried Thora, tearing herself from his grip.

"Now by Mola," exclaimed the Pink ardently, "but here is a wench to fire the blood of any man!" His hot eyes swept the loveliness of face and figure that neither grime nor coarse-fitting cotton could wholly disguise, his ears noted the cultured accent of Thora's speech, and his mind leaped to the natural conclusion.

"Listen, baggage; forget this lover who has the poor taste to discard you and let me be your protector. I swear. . . ."

But with a sob of terror the girl eluded his outstretched arms and ran blindly down the street. Bolan looked after her with lustful eyes. "Now curse the duty that forbids my pursuing! A pretty bird; I shall have to find out where it nests!"

## CHAPTER VII

WITHIN two days Thora realized the futility of attempting to escape from the trap in which she was caught. Now she understood the pitying smile of Elan, the words of Jan. There were no adequate authorities to whom an Unling could appeal, and the few individuals she sought to approach—two Scholar Men and a priest of Theo—only sought to take advantage of her distress. Nor could she flee from the city. The walls were high and the automatic mechanicals vigilant. Footsore from walking in unaccustomed footgear, and crushed in spirits, she finally took refuge in the only place she knew and watched the woman, Freeta, scrubbing floors, cooking meals, washing clothes, watched the terrible, unending struggle of poverty against filth and grime, and against hunger. She watched the husband Jal reel home from grueling hours in the mill, and she watched his vain attempts at washing up, watched as he wolfed his coarse food, watched his coming and going, a hulk of a man, brutalized by the life he was forced to live. Sometimes, before he reeled suddenly to bed, he would sit with the child on his lap and let it clutch at one of his calloused fingers.

Hunger drove Thora to eating the coarse food of the Unlings—the black loaf for breakfast, the black loaf and a slice of cheap synthetic meat for dinner. Or perhaps there would be a mess of boiled synthetic vegetables of poor grade. And through all the days it was the child that broke Thora's heart. His gaunt little body, his pinched feverish face and sunken eye seemed a terrible indictment of every luxury she had ever known. "Let me take him," she said once to the woman, and after that she held him for hours, trying to soothe his fretful cries. Tears came easily to her eyes now (she who had seldom wept in her life), as she rocked back and forth with the child, thinking, thinking.

Once she glanced up and there was Jan standing in the doorway. Her heart leaped, almost with joy. She had been thinking of him as she rocked; more than she would admit, even to herself. "Perhaps you would like to know," he said deliberately, "that two days ago they buried the remains of Thora the lovely." She stared at him dumbly. "Yes," he said, "they found all that

was left of her in her wrecked sports flyer. It was a great funeral," he said, "full of pomp and pageantry. Her father, the Titan. . ."

"Please," she said bitterly, "what pleasure do you get out of telling all this to me? Why do you like to torture me so?"

"Because it might be well for Thora the Unling to know that the princess of Titanism is dead—and that her father went from her grave to a meeting of the Council of Ten."

"My father would have to attend to his duties irrespective of any grief," said Thora bravely.

"Duties!" jeered Jan. "What duties? To plot how to sweat more gain from the toil of the Unlings? to doubtless devise plans for the undoing of the Equalizers?"

"Who deserve punishment!" exclaimed Thora.

"For what? For seeking to do away with the horror of this?" He laid a hand upon the emaciated child. She remained silent.

"Look at me, Thora the Unling; why are your clothes grimy—and your face and your hands? Surely if Thora the lovely, Thora who dwelt in marble halls with tiring-maids to wait upon her, who had scented waters in which to bathe and priceless linens and silks in which to go clad; surely this Thora would keep herself spotless no matter where she lived—even in the den of an Unling!"

She stared at him, her eyes burning.

"Yes," he said. "I stood outside your palace windows that night and heard the flippant words you uttered. It was then I decided to . . ." he stopped with a jerk. "Ah!" he said presently, "isn't all this misery enough to touch your heart? That babe in your arms—don't you know it is dying?"

"No! no!"

"Yes," he said inexorably, "it is dying . . . and for lack of food. Dying because your father refuses its father the price of milk."

She buried her face against the baby to hide the hot tears in her eyes and when she presently looked up he was gone.

It was the next morning that Jal the Unling said to her: "What do you think—that we can afford to feed you too? You will have to earn your own bread." He went heavily to his sleep and Thora stared miserably at his wife. "He doesn't mean to be unkind," said Freeta, "but his wages have been cut."

"What am I to do?"

"The mills want girls. I used to work in them once, but they won't take me any more, I'm too old. But you, you are young, strong."

So Thora went to the mills, to the synthetic foods department where the by-products of iron and steel and other ores were turned into cheap nourishment for the Unlings. It was hard work, ten hours a day, feeding material to a roller machine. The room where she labored was stifling hot, and her back and head ached from the unaccustomed labor. Now and then she saw Scholar Men passing, but to announce her identity would be but to invite ridicule and scorn, if not worse.

For six days she labored, receiving in return thirty-five zimes, an amount she would have been ashamed in former days to toss to a tiring-woman. . . . Now she eagerly seized the miserable stipend and hurried to the commissary with but one end in view, the purchase of

a bottle of milk. The baby, she decided, was going to be fed, even if she subsisted on black bread herself.

Suddenly one day in the mills—it was the beginning of her second week of servitude—a rumor ran from mouth to mouth that the place was going to be inspected. Into her own department entered a number of guards, lithe, watchful-eyed, and after them, in the midst of a group of personal attendants and Scholar Men, no one less than Rocca, the Titan of Steel himself, clad in the purple robes of his class. Thora stared, wide-eyed. Her father was making one of his annual tours of Industrial Cities. How many times had she accompanied him on such visits herself. Then she had been magnificently dressed, the center of all eyes, haughty, aloof, disdainful of the toiling Unlings who were now her fellow-laborers. With a loud cry that focussed every eye on herself, she flashed forward and sought to reach the Titan's side. "Father!" she cried, "father!" But the Titan recoiled with an exclamation of fear. It was the one great dread of his life that on some such visit an Unling might assassinate him. All he saw was a cotton-clad maiden of the Unlings trying to throw herself upon him. Thora's face and hair were grimed with sweat and soot, her voice hoarsened with emotion. Nothing about her suggested to him his dainty and beautiful daughter. Besides, his daughter was dead.

"Keep her away!" he chattered, "keep her away!"

Heavy hands laid hold of Thora, a fist struck her in the face, one of the Scholar Men brought a metal rod viciously across her shoulders, and sick with pain, she reeled and went strengthless.

"By Mola!" she heard her father's voice roaring, "is this the way I'm protected in my own factory? The wench tried to kill me—don't say she didn't—" The bellowing voice receded as she was dragged away and out into the mill-yard by two guards. "I didn't mean any harm," she faltered wildly. "I only wanted to speak to my father . . . my father the Titan Rocca. Please, please. . . ." The men looked at one another significantly. "Demented," said one; and to the girl with a rough shake but half kindly: "Begone, now, before you are seized and handled. Quick! and never come back here again or the Scholar Men will have you flayed."

With a sob she staggered into the street. Her father, her own father, had failed to recognize her, had allowed her to be abused, beaten. But to him she had only been an Unling. Ah, that was it; an Unling was something to abuse, whip. Bruised and aching, she crept into the only home she knew—and then paused, galvanized into a forgetfulness of self; for the woman, Freeta, sat rocking monotonously back and forth, and the Unling Jal walked the floor like a crazy man.

"What is the matter?" she whispered.

He caught her by a shrinking shoulder. "Matter," he cried hoarsely. "Look! That is what's the matter!" Dragged to the cradle, she stared down at the still little body. "Yes, he's dead! Starved, murdered! Oh," cried the Unling Jal, raising his knotted fists to heaven, "May Mola burn me in Hades forever and Theo blast me where I stand, if I fail to be revenged! Listen! I swear to join the Equalizers; I swear never to rest until the Titans. . . ."

But she heard no more of his raving. The baby was dead. The knowledge blotted out everything else. Silent and stiff, he lay, like a wizened old man, his



pinched, waxen features staring up at her without recognition. Dumbly, she crouched beside the cradle; for hours it seemed. The grey day deepened into darkness and at last she stumbled to her feet and walked out into the drab night. She did not know where she was going. The world was a place of horror. On, she wandered, on, heedless where she went, until beneath a dim street light a sudden hand reached from the shadows and swung her about, while at the same moment a voice boomed: "So here you are at last, after all my searching, you little wench, you!" and crushed against the breast of a man, she was staring up into the face of Bolan the Pink!

## CHAPTER VIII

IT was the last meeting of the Directors of Activity of the Companions of Equality. For days trusted agents of the Equalizers had circulated among the Unlings of the Industrial Cities, in the homes and in the mills (where they themselves mostly labored for bread), preparing the Unlings for revolt, distributing the metal disks. Now at last the leaders were gathered for a final review of their plans. Dolna was present, his pale pointed face carefully veiling the laughter and cynicism he inwardly felt. Elan addressed the Directors.

"Companions! everything is in readiness for the uprising. As you know, regiments of Unlings in the various cities have been secretly armed with iron shooters and more primitive weapons. The government depends almost wholly on the use of automatic devices for the crushing of any revolt. The operation of these devices varies with almost every city. In some the automatic principle resided in the devices themselves, and here it was easy to introduce our metal disks; but in several of the more modern equipped cities, the controlling machines are in the fortress-garrisons of the Pinks, and not so easily accessible. Yet even here we made successful contacts. Only two centers remain unapproached as yet—and these will be attended to tonight. Companions!" cried Elan, "without the use of their defense mechanicals the Titans, the Ruling Purples will be helpless, unable to make any real resistance. The majority of defense mechanicals will be under our control, and some of them we shall be able to use. Besides, the Unlings vastly outnumber the rulers and their guards and we will overwhelm the Pinks and capture or destroy them. Ventar has his orders. Already he has whispered to the Mechanical Brain. Tomorrow is the day, twelve o'clock noon the hour. To your posts, Companions, and be ready to strike at the appointed time. By Theo's grace, victory will be ours!"

"Victory! Victory!" shouted the leaders enthusiastically. One by one they left as they had come, until Jan and the Chief alone remained in the underground chamber. These two changed rapidly, one into the garb of a Pink, the other into the exclusive dress of a Purple. Then they passed out into the cold deserted countryside where under the shelter of a sagging shed two small helicopters were parked. For a moment they stood in conversation, gazing up at the clear, diamond-studded sky. "What we go to do tonight is as important as anything that has gone before. Be careful, Jan."

Jan looked at the magnificent head and penetrating eyes of his Chief. "And you, sir."

They shook hands silently, and a moment later wheeled

out the helicopters. Both machines rose at the same time, up, up, into the cold thin altitudes, higher than traffic protectors would normally rise, snug and warm in insulated cabins, and then levelled out in different directions of flight.

Diesel stared with a hint of nervousness into the cold level eyes that met his own. "Who are you? How did you get in here?"

The stranger smiled briefly. "I came through yonder window, by way of the balcony, and as for who I am—" he paused. "My name," he said quietly, "is Elan. Elan the Equalizer."

With an oath of surprise the Titan surged to his feet. "Careful," warned the other softly, pushing back his silk-lined cloak and displaying a weapon. "I have you covered with a silent shooter, and the least attempt to press a button or to call for assistance means . . . Ah; I see that you understand." The Titan bit his lips with fear and rage. "What do you want?"

Your company, my dear Diesel, while I inspect the central building of government in Cosmola. By myself I could not hope to go far without molestation, but with you. . . ." He linked his arm in that of the other, the muzzle of the shooter against Diesel's side. "And remember, wear a pleasant face, and don't forget that I am your friend. Such unfortunate forgetfulness would lose you your life and not result in my death or capture, since I assure you I could very readily escape."

They passed through a room where Scholar Men were busy over clerical routine, seemingly in intimate conversation, traversed a long corridor, and so by way of the lift, to the floor devoted exclusively to the Secret Service of the Pinks and the housing of the various automatic controls of national magnitude. Greco, whose nature it was that he could always be found at the post of duty, glanced swiftly up as the two men entered his office. He wondered who the imposing stranger on such familiar terms with the Titan could be, but waited respectfully for Diesel to speak. "My friend here," began the latter. . . .

"Would like to inspect the automatic-control-defense-mechanisms under your charge," finished Elan smoothly. "The Titan Diesel is uneasy about their proper functioning. He requested my service from half a world away. I was in Unamba," he said conversationally, "when he summoned me."

So that was the explanation. The surprise of not recognizing the stranger's face (Greco knew the features of every important Purple in Ardathia) subsided. "I am at your service," he said, bowing deeply, and led the way to the vast room where the mechanicals, some of them weirdly human-like, stood in menacing rows. At an observation board two Pink operatives sat in watchful silence. Strange lights flickered and danced on the observation board and little colored lights flashed in and out. Beyond a swift glance at their chief, the two operators paid them no attention. Dragging the inwardly furious Titan with him, Elan went from mechanism to mechanism, and under pretense of close examination dropped his little metal disks into their operation cavities. So cleverly did he do this, that if the Titan had not known of the Equalizers' plot, he would have suspected nothing. But as it was, for all his chagrin, he smiled grimly to himself. "Drop away, Chieftain of Equality; this time tomorrow. . . ." (For already the day and hour set for the uprising had been wirelessly by Dolna).

At last Elan came to where a large machine, with an upper body divided into numerous segments, stood. Each segment had its own operating cavity, and since but a single disk was left, he dropped it into the nearest one and turned away. "That," said Greco innocently, "is not an ordinary defense mechanism; it is our spy-control mechanism."

(Three hundred miles distant, dreaming of tomorrow's triumph, visualizing the reward that was to be his, the Purple Robe, the delights and fascinations of a Fashion City on forty thousand demos a year, no good angel of Dolna whispered to him of the dropping of that disk.)

"Well," thought Elan coldly, "when the Mechanical Brain speaks tomorrow, that is apt to be the end of one of your spies!"

Back they went to Diesel's office, arms still linked, shooter muzzle boring into the Titan's side. With the door shut on those outside, Elan led the Titan to the open window and pointed to where on the narrow balcony, four hundred feet above the ground, his small helicopter lay like a giant bug with elevated wings. "So I came," he said, "and so I will depart; but first. . . ." He bound the President of the Council of Ten securely to one of the upright pillars of the balcony. "Now you can watch my departure, and there is no danger of the alarm being given too soon." Diesel stared impotently, biting at his gag, as the lifting devices whirled with but the faintest purr, and the helicopter rose, cleaving the air. . . . but his humiliation and fury were somewhat appeased by one thought. Soon he would be released. . . . and after that would come tomorrow. An ugly look distorted his face as his thin lips straightened into a cruel line, as he stared vengefully at the stars.

## CHAPTER IX

THE City of Ferno was one of the model Industrial Cities of Ardathia, its defense system the highly centralized. In other centers of industry it was possible (for the most part) for the Unlings affiliated with the Companions of Equality to approach the operating mechanicals, but not so here. Therefore it was that the task of tampering with the control mechanisms of the garrison-fortress in Ferno fell upon Jan.

Over the eternal pall of smoke and soot covering Ferno like a blanket of gloom, Jan's helicopter hovered, motionless for a moment between the stars and the grey murk below. Then, having marked the position of the aerial flare burning redly on the highest point of the fortress tower, he dropped like a plummet until within a few yards of the flat landing roof. Here he hung with noiselessly whirling disks, scanning the landing closely, masked by the factory-made fog, but save for a dark row of helicopters and plane-flyers the place was empty. Technically, a guard was kept on the roof, but in the company of Pinks now garrisoning the fortress, discipline was lax, its Lootna being notorious for having other things on his mind, as Jan knew. Landing behind the row of dark ships, but leaving his silent motor running for a quick getaway, he loosened the shooter in its holster and stole towards the steel staircase leading to the depths below. All was still, only a dim light shining. On catlike feet he went down the steps and along the wide corridor at its foot. A sound of laughter and oaths drew him towards a doorway where, stealthily peering past

a door ajar, he perceived half a dozen Pinks (members of the negligent roof-guard) playing far-lo and drinking sakla. Conscious of nothing to fear from their commander, and secure in the belief that no Unling could reach them in their stronghold, the guards would spend the time where they were until relieved. At least, this was their habit, and Jan counted upon a full hour in which to accomplish his task and leave. In the shadow of the far wall, he went swiftly by the door, and came to another flight of wide steps. Cautiously bold he went down these, reached the bottom, and in the very moment of doing so a man came from a side passage and met him face to face. The dimness of the lights saved Jan for the nonce. The man could see the familiar Pink uniform but not his features. Yet something about Jan's figure must have appeared strange, for he asked sharply: "Who is this?"

"I," said Jan softly, making as if to brush past, but at the same moment with the swiftness of thought whirling up his shooter and bringing the butt down with terrific force on the unsuspecting head. With a stifled cry the man sagged floorward and he caught him before he fell and dragged the body to a dark corner. The blow had been heavy enough to lay any man out for hours, if indeed not forever, but nonetheless Jan secured the hands and feet and improvised a gag for the lolling mouth. He listened intently to learn if the brief colloquy and scuffle had alarmed any one else, but could hear nothing. A quick study of a miniature map convinced him that the side-passage from which the man had emerged was the one leading to the place where he wished to go; so he followed it, shooter in hand, and found that it did debouch into the control-room of the fortress. The room was of ordinary size and one great mechanical nearly filled it: a mechanical divided into sections and sub-automatic parts, each with its own operating cavity. Every part bore a white number and a symbol, and above the mechanical hung a huge map of the City of Ferno, picked out in relief, with the street towers duly specified and numbered. Apparently the room was empty, and Jan worked with swift thoroughness, dropping metal disks into every cavity, making those towers of destruction on the streets of Ferno amenable to the Mechanical Brain. Then he straightened, his task done, and made as if to retire; but at that moment, electrifying him with its suddenness, and seemingly coming from the depths of a dark passage leading away from the rear of the control-room, came a confused noise, a frantic pounding, and the sound of a woman's voice, shrill and somehow familiar, calling imploringly his name: "Jan! Jan!"

## CHAPTER X

STARING up into the face of Bolan the Pink, Thora sought wildly to escape his embrace. "Leave me go!" she panted, but the Lootna's grip only tightened. "By Mola," he swore, "this is luck!" "Help! help!"

"Quiet, you wench!" said Bolan with an oath. The door in the house behind him opened, evidently one of his city rendezvous, for to the shambling Unling appearing in the doorway, he shouted, "Here, you! Help me with this she-devil before she rouses the neighborhood!"

Between them they dragged the terrified girl into the house and barred shut the door. But just in time.

Outside could be heard the sound of running feet, the hoarse call of voices. Bolan shook his clenched fist. "Damned scum!" he muttered. "They'd welcome an excuse to murder a Pink!" The evil-faced Unling held her in a vise-like grip, while Bolan stifled her screams with his broad palm. Behind them, coming from an inner chamber, appeared two Unling women in disarray. "Who is this?" demanded one of them jealously. "No concern of yours," answered Bolan roughly. "Out of the way, wenchies; and if they break in the door, see to it that you say one of you did the screaming, or it will be the worse for you!" And to the Unling: "Help me with the baggage." Half fainting Thora was carried up a flight of steps; then by means of a short ladder, to the roof. Here her hands and feet were secured and she was thrust into the cabin of a plane-flyer which instantly took to the air as the Lootna spun the propeller. "There is nothing to be afraid of," he said, smoothing her hair. She shrank from the caress. "Where are you taking me?"

"To where you will rule a queen over your humble slave."

She tried to control the shuddering of her limbs. "Lootna," she said, "you are making a terrible mistake." He purred amorously.

"Listen," she cried feverishly; "I am the daughter of the Titan Rocca!"

"Ho, ho!"

"But I swear that it is true!"

"I might believe you," he said with a grin, "if I had not paraded at her funeral myself. Perhaps you are not aware that the daughter of Rocca is dead."

"But that was not me they buried. . . ."

"Palpably not!"

"Only some old bones found in my wrecked flyer. I was captured by the Equalizers and. . . ."

"Come, come," said Bolan tolerantly, "tell another story."

She cried desperately: "Take me to the Titan Rocca and let him say if I am lying! Think—if I am telling the truth your fortune is made!"

"And if you should be telling a lie, I would not only lose you but be punished and disgraced in the bargain. Ho, ho, you're a clever girl! Come, cry surrender and give me a kiss."

She squirmed her head away from his advancing one, beat at him with bound hands. "Well, well," he said evilly, "everything in its place. The sweets can wait until later. Until later," he said significantly.

Thora shrank into her seat. She involuntarily thought of Jan. He had kidnaped her, too, but never to treat like this. Oh, if he were only here now! The flyer swooped to the fortress landing. She did not resist as Bolan lifted her in his arms and carried her down the steel steps into the interior of the building. Every ounce of strength must be conserved for the struggle ahead when her bonds were loosened, and in some fashion she must cozen her captor into loosening them. Bolan paused and stared into the room where his tipsy roof guards were gambling and drinking. "Keep it up, my lads," he cried gayly; "I've better sport ahead of me!" and the girl in his arms shuddered. The men answered him with broad jests. On he went, to the floor below. He did not see the bound and unconscious figure huddled in the dark corner, nor suspect that an enemy had but recently passed that way. But unlike the latter, he

kept to the broad corridor and so came to his own private quarters where he laid the girl on a couch and looked down at her with avid eyes. She steeled herself to smile back. "Ha!" he cried, throwing off his tunic; "so you're thinking better of it, eh?" He knelt and took her into his arms, oblivious of the sick loathing that shook her slender body. "By Mola, but you're a beautiful wench!" His grasp tightened. "Listen, I swear that I'll treat you right! I swear that you won't regret it if you. . . . Look at me; I am not a man who cares to use violence. Be my mistress willingly and I'll put you in a Flower City—do you hear?—away from the hell of Ferno. And sometimes there will be Fashion Cities to boot! I know you've been the favorite of some Purple. I can tell that by your manners and speech, but you see if I treat you as well as he. . . . before he tire. . . ."

She said faintly, "The cords; they hurt my wrists and ankles." With an oath of contrition, he undid the bonds. "There, there; how is that?"

"I'm so thirsty," she murmured.

"Wait," he said; "I'll get you a glass of water," and entered an inner room. Immediately she was on her feet and at the door. The latch gave under her hand—Bolan had not secured it—and she flung wide the door and darted down the corridor, in her confusion and fright taking the wrong turn; for she had thought to reach the roof and escape in a plane-flyer, or failing in that. . . . Behind her she heard a thunderous oath of rage, the sound of pursuing feet. Oh, if she could only reach a window, a balcony, she would hurl herself to death before submitting to recapture! But the windows were all set high in the walls and tightly closed. Down a side hall she ran, and twisted and turned in a maze of passages, but the sound of her flying feet clad in the clumsy leather shoes of an Unling, was sufficient to apprise Bolan of the direction taken. She could hear him running, hear the breathless curses he uttered, and went sick with horror at the knowledge that he was gaining. Oh, if she had a weapon—some sort of a weapon! The winding passage debouched into a large chamber with no exit but a far door—and this door was bolted! Madly she beat at it with both hands. Through the heavy glass square set in its upper length, she could see beyond a brief dark corridor into a dimly lit room, a room where a monstrous creation of iron and steel lowered, where a tall figure stood, half turned her way, in an arrested attitude. She could not see this figure's face, but something about the tilt of the head, the forward thrust of the broad shoulders was unmistakable. Oh, it couldn't be—not this place—she was crazed with fear—yet none the less, she shrieked wildly, hopefully, "Jan! Jan!" and miraculously, almost with the utterance of his name, Jan was there. The door splintered as if under the impact of a cyclone; through it hurtled a man in the garb of a Pink. Brought to a sudden pause in mid-stride by what, at first, he deemed the intrusion of one of his command, Bolan let out a thunderous oath. "Begone!" he cried. Then almost instantly he saw his mistake and reached for a weapon; but in laying aside his tunic he had disarmed himself.

"Jan! Jan!" babbled the girl, half delirious with fear and relief. There could be no mistaking the situation. Jan saw the crouching maiden, the disordered dress of Thora the lovely, and filled with deadly, ungovernable rage, forgetting his shooter, hurled himself upon the

Pink commander with murderous hands. Down went Bolan under that impetuous rush, but he was no novice at the art of rough and tumble. Twisting his body as he fell, he escaped the full impact of Jan's descending weight, and rolling clear was almost instantly on his feet, but no quicker than was the Equalizer himself. Coming together with a crash, they recoiled, and then toe to toe slugged with knotted fists. A blow took Jan in the mouth, splitting his lip; another caught him over the heart and his body sagged. But at almost the same moment his right fist smashed Bolan's nose into a bloody pulp and his left buried itself in the solar-plexus, knocking the wind from his lungs. Both clenched, unable for the moment to follow up their respective advantages, and in that second was heard the approach of someone in the passage through which the girl and the Pink commander had come. Instantly Bolan twisted himself free of Jan's grasp and let out a gasping roar. "This way!" he bellowed, "this way!" The crisis brought Jan to his senses; his head cleared. Quite methodically he stood back, pulled out his silent shooter, and shot Bolan through the body. Not waiting to see his antagonist fall, he leaped to the girl's side and swung her to her feet. "Quick!" he cried tensely: "this is no time to faint. Follow me." Hand in hand they dashed through the splintered doorway, through the short passageway and into the control-room beyond. Behind him sounded a shout of alarm. "He'll waste a moment over the body," said Jan grimly. "Perhaps we can win the stairway to the roof before . . ." he did not finish the sentence. Swiftly they raced across the control-room and along the passage to the broad corridor. "Where were the rest of the Pinks?" he wondered—and even as he wondered, one flashed into view. He shot, and the fellow went down. Up the stairs, they went, he carrying the girl so that her heavy shoes would not clatter on the steps. His own were light, with rubber soles sheathed with felt. Past the room where the unsuspecting roof-guard still gambled and drank, they stole, but just in time, for behind shrilled a piercing whistle, the siren of alarm. Across the roof sprang Jan to his waiting helicopter. Into the cabin he thrust the half-fainting girl, leaped in himself, threw the clutch, and even as the first of the Pinks emerged on the roof, his craft surged upward, cleaving the air like an arrow shot at the sky. Once aloft, beyond range of the iron shooters, he was not afraid of pursuit. In the grey fog he could easily elude another plane; besides those of the Pinks were centrally controlled and his own independent and powerful oil-engine would soon carry him beyond their scope.

Under the enormous stars, at a far height above the earth, he straightened out his flight and gave some thought to the girl at his side. It was impossible, of course, to take her back to Ferno. For that matter it had never been his intention to leave her there during the morrow's uprising. In any case she would have been taking this aerial journey with him tonight; but he had not expected to pick her up at the Pink Fortress, and his heart sickened at the thought of the fate he had saved her from. By this time she had doubtless learned her lesson, and if she hadn't. . . . He glanced at her sideways. How beautiful she was despite her cropped hair and unlovely garb. More than he cared to admit, her face had disturbed his dreams; and not alone when he dreamed. He shook himself a little impatiently. "All

right?" he asked gruffly. Her hand went out and touched his arm. So they clove the night, a hundred, a hundred and fifty miles an hour, until after an endless interval (brief for the girl, for she had slept), the helicopter dropped into the same abandoned flying field Jan had brought her to on the morning of the kidnapping; but Thora was not afraid; indeed her whole being was full of a sweet content. She could have asked nothing better than to have flown on with him forever. But opening the door, he put out his hand and said simply, "Come." Yes, she would come. Confidingly she slipped her slim fingers into his. She thought, with a little rush of tenderness, that she would go anywhere he wanted her to, and gladly. How different were her emotions from that other time. Then she had been bound, afraid, but now clinging to his hand, she followed him into the deserted house, down the rickety steps, through the secret door into the tunnel, and so to the underground chambers beyond. Elan sat at his desk, poring over a map, as if he had never stirred since her last interview with him; but now he was garbed in the gorgeous dress of a Purple; and in fact had arrived but a few minutes before she had. He bowed gravely, showing no surprise, since (though she did not know this) her coming was an expected thing. "Conduct her to her chamber, Jan; let her change and rest. In the morning we shall talk."

Still clinging to his hand, she followed where Jan led. At the door of the remembered chamber, he paused and said: "Inside you will find every facility for your comfort. Do not be afraid to sleep. In the morning, dress in the garments of your class which you will find laid out for you." He turned away irresolutely, and then said half whimsically: "This is farewell to Thora the Unling." The place where they stood was in semi-darkness. Impulsively she caught his hand and raised it to her lips; then with a little sob darted through the doorway and swung shut the door.

## CHAPTER XI

IT was heavenly to put off the coarse clothes of an Unling, to bathe in scented water, to anoint her bruises with healing ointments. It was luxurious to lay her weary body between cool, grimeless sheets. Almost instantly she fell into dreamless slumber, and it seemed but seconds later that a rap sounded at her door and a muffled voice bade her get up, as it was morning. Somewhat stiff and sore, she arose and bathed, and dressed herself in the rich garments at hand. The feel of smooth silk on her skin was like a healing benediction. "Yes," she thought, viewing herself in the tall mirror, "I am beautiful," and the thought gave her exquisite satisfaction—not out of idle vanity, but because it was comforting to think such fairness must surely win approval in the eyes of one beloved. True, her hair was cropped short; and brought up in the fashion of wearing it braided and piled high on the head like a coronet, she thought this was disfiguring (unaware that it gave a boyish loveliness to her shapely head far more appealing than the coronet of which she had been so proud). Yes, she was lovely; and conscious of her loveliness; and made more lovely still by a sweet confusion at the thought of again meeting Jan. But only one person was in the outer room, Elan, standing by the desk, clad this time in the cotton smock of an



Unling. She looked around hopefully. Elan gave her an understanding glance. "He is not here; he is gone." "Gone!" Her heart sank. She could not hide the disappointment on her face. "Without a word to me!"

The Chief of the Equalizers seated her in a chair by the desk and brought to her attention a tray on which lay a glass of milk, a loaf of white bread, and synthetic butter of the purest quality. "Jan had work to do," he said quietly. "Eat now." But though she drank the milk gratefully, she was unable to relish the food. Elan eyed her, not without sympathy. "For almost a month, Thora, you have lived and labored as an Unling. I will not disguise from you the fact that Ferno is the worst of the Industrial Cities, and the hardest to escape from, and that it was for that reason we sent you there; but the others are not much better. Now you know—not by rumor but through personal experience—what insults and almost unbelievable hardships and miseries an Unling must stand. You know—and perhaps the knowledge has touched your heart. But whether it has or not, this morning you return to your father's palace. Outside a sports flyer is at your disposal to take you there. You should," he said, glancing at his timer, "arrive home by eleven at the latest—at noon we strike!"

"Strike?"

"Yes. It is immaterial whether you know it now or not, but today, under our leadership, the Unlings rise in rebellion and bid for power. All preparations are made and I have reason to expect a glorious victory. But if for some unforeseen cause we should fail. . . Then," he said, "remember your own Unling experience and exert your influence for the merciful treatment of my unhappy people. But," he cried "we shall not fail; we are going to succeed!"

"And if you succeed," she asked at length, "will you kill my father?"

"Poor child," answered Elan, "your father's life is in little danger. It is true he would slay us if he could—and ruthlessly; but we Companions of Equality are not lovers of bloodshed, nor are we actuated by motives of revenge. Sufficient for us, if we hold the Industrial Cities, to starve your father and his kind into submission. But enough," he said in a quieter tone; "time flies, and there are still tasks to complete. Follow me."

Up into the sunlight of a clear, crisp day she went to where the sports flyer waited. Elan helped her aboard, and as the craft soared aloft she looked down and for a brief space saw him standing, a tiny, remote figure; then the abandoned field dwindled, the flyer raced ahead, and she was alone in the blue void with a heavy, desolate feeling tugging at her heart.

## CHAPTER XII

ON the aerial landing platform of his palace overlooking Ironia, Rocca the Titan stood talking to the pointed face Secret Service agent, Dolna. At the eleventh hour Dolna had deserted his post as Director of Activities for the Equalizers and planned to the Titan's side. Beside them stood Rocca's red and gold helicopter with the uniformed pilot at the controls. It was the Titan's intention to fly to Ironia and from the security of the garrison-fortress view the checking of the uprising in that city. Diesel, befitting his position as president of the Council of Ten, was stationed at Cosmola, and the other members of the Council were

scattered throughout the principal Industrial Cities of the country. Already Diesel had broadcast a description of Elan, and the Pink Police forces were agog, for the reward read that, dead or alive, he who brought in the notorious Chief of the Equalizers would receive a cash reward of seventy thousand dernos. Dolna reported a last interview he had had with Ventar, and Rocca dictated a wireless report of the interview to Diesel and was about to climb into his helicopter when a small sports flyer dropped down from the heavens to the landing place. Wondering who could be paying him a visit at such a time, he took a curious step towards the strange craft, and then from the cabin of the craft leaped an impetuous figure, two arms caught him around the neck, and a vibrant voice with a half-sob in its depths cried joyously, "Father! Father!"

The Titan staggered back with incredulous eyes. "Am I mad, dreaming?"

"No, no!"

"But it can't be Thora. . ."

"Yes, it is I; feel how solid I am."

"But Thora is dead. . ."

"No, dear, alive."

Folded in his arms, she told him of her kidnapping, of the hoax that had been played on everyone by the planting of bones and jewelry in her wrecked flyer. His rage was terrible. And she told him of being stripped of her fine clothes and sent to toil as an Unling in the City of Ferno.

"But why didn't you appeal to the Scholar Men, the Pinks?"

Thora shook her head sadly. "I see, father, that you know little of how an Industrial City like Ferno is run. The Pinks seldom enter the city, and the Lootna I appealed to laughed at and insulted me."

"He will rue the day!"

"While as for the Scholar Men," she shrugged her shoulders. "Do you remember the Unling maiden who tried to appeal to you one day?" The Titan started. "That was I, father."

"Great Theoi!"

"I called you, but you were afraid; and the guards held me, and the Scholar Men beat. . ."

The Titan groaned with anguish. "But I didn't know. . . I didn't recognize. . . Besides I thought you dead and wasn't expecting. . ."

"Yes," she said, "I understand, and don't grieve about it, dear; but can't you see how terrible it all is for the Unlings who suffered worse than I? For nearly a month I toiled with them, and oh, father, their condition is horrible!"

"But how did you escape?"

"A young Unling helped me, and the Equalizer sent me back."

Still dazed by the miracle of her resurrection (for he had sincerely grieved her as dead), and holding her hungrily in his arms as if he must continuously assure himself of the reality of her presence, Rocca lost count of time, and only the voice of Dolna brought him back to the issues at hand. "Titan!"

"Yes, yes. This is my daughter. . . do you understand? . . . little Thora risen from the grave. . ."

The Secret Service agent who had heard every word uttered and understood the situation, bowed respectfully. "That is wonderful, sir; the whole country will rejoice; but—it is twenty to twelve."

Rocca started. "By Mola, I had forgotten. We must go at once. Come, Thora, I cannot risk you out of my sight." He helped her aboard the helicopter. "The Equalizers are inciting the Unlings to revolt today," he said grimly, "but—we're ready for them!" He was rapidly regaining his wonted manner.

Then her father knew—the Council of Ten was aware of the plot against the government. She had hesitated to speak of it, tortured by conflicting emotions. Sympathy for the Unlings, hatred of suffering, tyranny newly born in her bosom—all these warred against the interests of her father and her caste. And above everything was her concern for the safety of Jan. If the uprising failed, Jan might die; and if it succeeded. . . .

In a few minutes the helicopter dove through the fog of smoke over Ironia and landed on the roof of the garrison-fortress. Five minutes to twelve. Looking down from that immense height it was possible to see that something untoward was happening on the streets of Ironia. Out of the noisome houses, out of the black mills breathing smoke and flame the Unlings were pouring like swarms of ants. From a hundred thousand throats, like the beating of heavy surf on a rocky coast, rose a menacing roar . . . up, up! and rising in concerted volume, chanted in unison until every thunderous word was distinctly audible, came soaring aloft the slogan of rebellion. "Down! Down with Titanism!"

Rocca's face hardened into an ugly glare. Away from Thora's side he rushed to the edge of the parapet, Dolna following. "Shout, damn you!" he cried, shaking his fist, "Shout! but at twelve o'clock. . . ."

Twelve o'clock! Deep in his secret laboratory, Ventar the Unling, Ventar the Renegade, threw a switch; the Mechanical Brain throbbed and glowed, pulsed like a thing alive; and in every operating cavity of every mechanical throughout Ardathia, the metal disks glowed and throbbed in unison with the Metal Intelligence. And in a certain segment of a spy-control mechanical in Cosmola one glowed and throbbed, and the delicate mechanism controlling the hair-spring valve which, opening, would release a devastating ray, trembled, and hung in the balance, hung perhaps for the fraction of a second, effected, not by the will of the Mechanical Brain to destroy, but by the gentle throbbing of the disk that established its control. And then. . . .

High on the roof of the Fortress Building in Ironia, dreaming of today's triumph and tomorrow's reward, Dolna of the Pink Secret Service, Dolna the spy, clutched at the breast and staggered; and even as he staggered there was a flash of light, a stunning noise, and then literally blown to pieces, all his glorious dreams and anticipations went out in one fleeting burst of agony. Thrown to the floor by the violence of the explosion, and yet practically uninjured, Thora regained her feet and cried out in terror, "Father! Father!" she rushed frantically to his side; guards came running from everywhere. Within a dozen feet of Dolna when the capsule exploded, the force of the explosion had thrown the Titan prostrate at the base of the parapet. His clothes and flesh were torn and burnt, spattered with blood—and the flesh of the secret agent; and the searing heat of the expanding blast had singed his hair, his eyes. "Thora," he babbled, half unconscious, "Thora." She gathered him into her arms. No longer was he the mighty Titan of Steel, but a pitiful old man, broken, groping. "Where are you, Thora?"

"Here, father, here," she cried rushing toward him. "Something hit me. Why is everything so dark? I can't see."

And then in a wail of agony that broke thinly against the terrible crescendo of cries rising from the streets: "I am blind! Blind!"

### CHAPTER XIII

**R**UIN, ruin! In the face of what had seemed almost certain victory, bloody disaster!

Yet the orders had been explicit. In constant communication by wireless with Ventar and other leaders, Elan had ordered the Mechanical Brain to take control at sharp noon and the Unlings to rise. The automatic mechanical weapons were to remain silent—or to function only when directed to do so, and then in those sections or parts where most needed. The great gas-planes and bombers, for instance, automatically controlled, and which with their down-pour of gas and explosive shells could have liquidated an uprising in ten minutes were thus to pass under the control of the Equalizers and be rendered inactive or utilized to intimidate and break the resistance of the Titans. The paralyzing of the automatic weapons of the government, the overwhelming of the ruling class and its henchmen by masses of Unlings—these were the major tactics to be employed, the complete plan of action.

Confident of success, flushed already with the wine of victory, everywhere the numbers of the Equalizers flung themselves into the last minute task of inspiring the Unlings. This work had gone on quietly for weeks; but now the leaders threw off their masks and boldly called for revolution. "The mechanicals will not fight against you," they cried; "we have won control of all automatic-defense devices. The gas and air-bombers are ours; the towers won't work; we have silenced them. Now! now is the hour to strike! Forward, Companion Unlings! The night of oppression ends, the day of freedom dawns—forward to power!"

And the Unlings responded.

In the factories they seized the Scholar Men and made prisoners of them. Some were badly beaten. In Ferno several were killed resisting arrest, and at least one murdered by an Unling he had unjustly whipped but a short time before. Then a few minutes before the hour of noon the Unlings surged into the streets—all over the country, in every Industrial City of the nation, they surged into the streets—and shouts of insurrectionary phrases, hitherto whispered under bated breaths, rose seditiously on the air. "Death to the Purples—death! Down with Titanism!" and as if by magic over their heads materialized the gold-red banners of Equality. So they marched, hundreds of them, thousands of them, millions, shouting their seditious cries, singing their seditious songs, and then—

Pacing his cell like a caged lion, oblivious of the wounds in his head and thigh, hair matted and caked with blood, Elan the Equalizer Chieftain visualized again the horrors of that awful moment when the towers spoke. Yes, the towers spoke, the automatic mechanicals, and iron shooters and gas ejectors vomited death. In Ferno the street towers mowed down Unlings as a scythe mows down grain. Men, women and children withered in the face of that awful reaper. First one deck, then another, and then a third, sweeping the streets

with automatic precision, turning them into ghastly shambles, into infernos of destruction. Elan shuddered. He had led in Ferno and Jan had led in Ironia, but after that first, withering blast (alike in all Industrial Cities) there had been nothing any leader could do—nothing. Practically unarmed in the face of erupting towers, the Unlings had been helpless, like sheep before the butcher. Ah, that was the thought that tortured—like sheep before the butcher—and he had led them there! And the irony of it was that of all the thousands who had been slaughtered, he, who would have welcomed death to cover up the blunder of defeat, to blot from his consciousness the ghastly sights his eyes had witnessed, had failed to die. Miraculously he had survived, where countless others had perished. And Jan, too, had survived. Picked unconscious out of the shambles—conspicuous as Companions of Equality by their gold-red shirts—they had been thrown into prison, identified as the two badly wanted arch-traitors, taken to Cosmola, confined in the cellhouse of the Pinks, and left to await whatever fate the Titans might mete out to them. Elan looked at Jan with a bleak face. "Ventar betrayed us." Jan nodded; and after a moment, stretching out his great hands: "If I had these on his throat!"

The other shook his head. "Of what avail are such thoughts now? Besides do not blame the weak, ambitious tool, but the power of Titanism that corrupts and debases everything it contacts. Or blame me for trusting him so blindly. I knew that he was weak but overwhelmingly ambitious. I thought to harness that ambition to our cause, making its realization dependent on our success. Evidently I failed." He bowed his head. "It is I who should be punished—I."

Before Jan could answer, a key grated in the lock. Both men glanced at the door. Perhaps the time had at last come to be taken forth, questioned, perhaps tortured, and then. . . . Jan shrugged his shoulders. Men who devote their lives to desperate causes are seldom afraid of the penalties meted out for such devotion. The iron door creaked, swung slowly open. Elan straightened, Jan leapt to his feet with an exclamation of surprise, for beside the stolid prison guard stood one other, one of whom he had thought almost constantly but had never expected to see again. "Thora!" Almost she flung herself into his arms. "O my dear, you are hurt!"

"It is nothing, nothing; only a trifle." The guard stared with fallen jaw. "What was this?" He fingered the shooter in his hands nervously. "Leave us alone," commanded Thora. The man did not stir. "By your leave, Titaness, the orders of the Chief Greco. . . ." She stamped her foot. "It is I who give you orders here. Do you dare question them? Begone! before I have you handled!" Reluctantly the man withdrew and she swung shut the door after him. From a bag she took rolls of cloth, a jar of ointment, one of water, and a bottle of sakla. "See; I thought you would be wounded and brought these." Elan smiled gravely. "I am afraid it is a waste of time to dress our wounds; but if you must. . . ." Gently she bathed his head and thigh, bandaged them as best she could, forced on him a drink of the wine; then she turned to Jan. "To what do we owe the charity of this visit?" He spoke lightly, but his eyes were serious. She looked at him bravely. "Do you think that you could be in danger and I not care? Do you forget that you rescued. . . ."

"And do you forget," he interrupted, "that if it had

not been for me, you would not have been kidnaped, forced to toil in Ferno, exposed to the danger I saved you from?"

"Anyway," she cried passionately, "I cannot forget that you did save me, and I am grateful. I pleaded with my father for your lives. I told him of the fate you saved me from. My father is blind, helpless. . . ."

"Blind!"

"An explosion destroyed his sight," she brushed a tear from her eye; "and when I told him I loved. . . ." She stopped appalled.

"Nay, child," said Elan softly, "do not be ashamed. You love Jan, and he loves you. That is as it should be. And your father. . . ."

"Has made the Council promise me his freedom and full pardon."

Love and life! The quick blood surged into Jan's cheeks and then ebbed again. He gripped his Chief's arm. "Not without you!"

"Oh," cried the girl despairingly, "I pled for him also, but. . . ."

"Hush," said Elan quietly. "Do you think that they will ever let me escape alive? Once I was of their class—before either of you were born—and they will never forgive my desertion. But as for you, Jan. . . ."

"I told them that he freed me to warn them of the rebellion," said the girl; "that he. . . ."

Jan let out an exclamation of anger. "How did you dare!"

"Because I love you."

"Do you think I will ever accept life as a traitor?"

"Yes," said Elan deliberately, "yes, you will; because it is your duty to live. Don't you understand? Why did we kidnap the daughter of Rocca? So she might learn by actual experience what the Unlings had to suffer, that her sympathies be aroused, her conscience touched."

"Oh, they have been," cried Thora in a passionate whisper, "they have been!"

"Yes," said Elan sternly, "but time might again harden your heart, make you forget. Therefore I command Jan to leave this cell alive, to join his life to yours, to become the son-in-law of the Titan of Steel; in time, through you, a Titan himself. Not out of desire for love and life, not out of ignoble ambition, but to do what he can to ease the lot of the Unlings in the days to come. As for me. . . ."

"You must escape," whispered the girl tensely. "Here is a weapon I brought you. Take it, take it."

"What for? To slay my guard with? But there has been enough blood shed already. Oh," cried Elan, "do you think if I desired life I would not seek to escape from this cell? Do you think if I thought for one moment that the standard of revolt could ever be raised again in the Industrial Cities, I would not try to live and raise it? But no," he said mournfully, his voice dropping, "never again can the Unlings hope to rebel against the power of the Titans. The mechanical forces arrayed against them are too great, too overwhelming. Our one hope lay in Ventar—and the Mechanical Brain. But Ventar betrayed us, and his genius is now allied with the might of the Purples. You two must live and use your influence for mercy in the Council of the rulers. As for me, I have nothing further for which to exist; all my hopes are dust; and I am sickened to death by slaughter. Do not seek to deny me the boon of dying as my Companions have died."

His voice died away. Thora was sobbing bitterly. "Nay, do not weep. But when you sit in the place of the mighty, forget not my unhappy people."

## CHAPTER XIV

IT is summer in the palace of the Titan Rocca. Fountains are splashing, birds are flitting through the terraced gardens. Bees, heavy with honey, fly from flower to flower and humming birds hover over scarlet blossoms.

Two years of blindness have aged the Titan. His manner has become childish and gentle. Sitting on the verandah, he is wholly engrossed in the child in his lap. The child has become his life. It crows lustily and tugs at his white whiskers with dimpled fists and the old man gurgles back, absorbed in the play. No longer does he give thought to the government of the country, to his business affairs. More and more has he delegated his place and power to his daughter and his son-in-law, Jan. The latter is now actually Titan, sitting as his representative on the Council of Ten. "Yes, yes," he agrees, "let something be done for the Unlings; industry is too hard on them." Tears come to his sightless eyes when he hears Thora tell of the sufferings of the people of Ferno. He weeps very readily and wonders why men are so cruel to one another. Jan has learned to love him. No one could hate the broken old man.

Some distance from the two childish playmates, one in the morning of life and the other in the evening, Jan and his wife stand talking softly together. Thora is lovelier than ever, and in his rich dress of a Purple Jan is a powerful and commanding figure. Their eyes stray to where the eternal cloud of smoke and soot hangs like a pall over Ironia. "There is so little we can do," says Jan moodily; "and sometimes I feel that I am a traitor to the trust he put in me." She does not have to ask who "he" is; she knows he is speaking of Elan. "They are nine to my one on the Council, and Diesel. . . ." Thora nodded understandingly. Diesel was the stumbling block. Unlike Rocca, he had not aged; he was just as hard and as ruthless as he had ever been, seemingly just as vigorous; and his position as president of the Council gave him almost dictatorial powers. "In our cities we have been able to make some alterations for the better, but not many. Diesel fights any drastic reforms on the stand that it would weaken governmental defense. He hasn't forgotten that I was once an Equalizer, and neither have the other Titans. Of course I have wrung some concessions from the government: the right of the unemployed to go outside the cities and farm as in the old days; but even here there are restrictions. The government gives no aid (I have to do so myself in the face of bitter opposition), and the Unlings must not settle near a city but go to the waste spots of the country. And then they are not safe. I have reason to fear . . ." and he told Thora of a meeting where Ventar the genius, now wearing the robe of a Purple, had addressed the Council in burning words it thrilled them to hear.

"Already," Ventar said, "My Mechanical Brain runs the automatic machinery of the country—and that is but the first step. Listen, Titans, why should you have Unlings to do the work when machinery can do it better? They groan and complain and are a menace to your rule. Drive them out of the cities into the countryside, and if they become dangerous, hunt them down!" He

paused and scorched the Councillors with his burning eyes.

"But we need some of them to repair the automatic machinery," protested Diesel.

"For the present, yes. But what if after a while I created thousands of machines whose function it is to repair their worn-out or broken-down fellow-mechanicals? Once I had automatic machinery toiling at production, repair machines busy at repairing, and a vast brain dominating all with the command to keep the wheels of industry turning, what further need would there be for human labor?"

The stupendousness of the idea dazed the Titans; they stared fascinated. Only Jan surged to his feet. "Fools!" he cried, "what would you do with the things the machine produces? In what market would you dispose of them, if you destroy the Unlings? From whence would flow the prosperity and wealth you now enjoy?"

But Ventar silenced him with uplifted hand.

"Have you forgotten the dream of the Equalizers? Was it not to destroy the rule of the Titans, liquidate the Purples as a class, run the machine for service and not profit? Aye, the old order passes, but it is the Titans themselves who bring about the change, destroying the Unlings, the unfit, the weak. As for prosperity, of what does wealth consist? Will not the machine build palaces in which to live, weave fine clothes to wear, produce viands of the richest and rarest? Will not the machine give leisure and luxuries, make of the cities storehouses of plenty? Tell me, what will the Titans, the Purples, lack if they destroy the Unlings, their present 'Market,' and produce for use—for themselves. . . ." He paused, breathless.

"Oh," he cried, "give me the power and in ten years, fifteen . . ." he waved his hand. "And more than this I see," his voice rising prophetically. "I see the marvelous automatic cities of the future, roofed against the elements, running by the will of the machine, in which your children shall dwell like gods! Oh, I see," he cried, his voice running on with the wild fervor of the genius, the madman, while the Titans listened enthralled and spellbound; by the force of his personality, themselves dreaming dreams.

Now standing with his wife in the garden, four thousand miles away and a day distant in time from that scene, recounting the above to her, Jan glanced at the child on the knee of the old man and murmured: "To drive out and destroy the Unlings, the creative mass, that will lead to destruction, to ultimate ruin. But perhaps it can be prevented. There is little Jan. We shall train him to carry on the work after us; and he will train his children; and in the end," he put his arm around his wife's waist, "and in the end," he said, "our purpose will be achieved and Elan will not have trusted us in vain." So he spoke, seeking to comfort himself, but his eyes could not pierce five hundred years into the future, read the incredible things that were yet to be, nor see that distant descendant of his (also named Jan) come out of the desert.

## CHAPTER XV

HE came out of the desert leading a burro, for strange as it might seem to the dwellers of cities, there were still burros and other things living in the remote waste lands, in the canyons and



foothills of the mountains. Over his head great airships hurtled, and once he saw a flaming meteor fall from the sky into what seemed a golden bowl—an interplanetary flyer from outer space. He stared at their blurring bulks, having almost forgotten the marvel and wonder of the machine in his ten years of absence. What did the inhabitants of distant Mars, and of other planets, think of those cylindrical monsters which came from earth bearing the products of the Machine for barter, with not a human soul aboard? Did they believe the automatic mechanicals which traded with them so cannily, the grotesque mechanisms which did the will of the lesser "brains" in the spaceflyers, as they in turn had impressed on them the commands of the great brooding Master Brain—did they believe them to be living beings? Strange, strange, to realize that for year after year, century after century, those shuttles of iron and steel had swung back and forth through space without the aid of man; nay more, that the dwellers in cities had forgotten their very existence! He shook his head. But now the machine was all around him, reaching up into the sky tall towers of stone and steel, digging into the earth with ponderous fingers. Flaming lights burned and blistered the sands, eating great holes into the bowels of the desert. Mechanisms ran this way and that, mending, building, carrying, lifting, and, save for himself, there was not a human being in sight, nor aside from the burro, a living creature.

Now the burro was afraid of the roar and clangor, afraid of the monsters congested in this place; so the man loosed him and watched him scamper back into the barren wilderness; then he approached the scene of the Machine's mining activities.

He walked this way and that among the plunging mechanisms, his life the price of carelessness or mischance, and came last to the great radial tower rising into the heavens. Lifts were going up and down in monotonous procession, bearing burdens of precious ores, and watching his opportunity he leaped aboard and was wafted to the broad roof of the tower, eight hundred feet above the desert.

Miles of desolation lay unfolded, and distant mountains, and with his eye he could retrace the toilsome way he had come on foot.

Where he stood was an eyrie of the Machine, and it was awesome to think that for hundreds of years no human being save himself had gazed from this height.

Here was the domain of blind, mechanical force doing its inscrutable work without the supervision of man.

Even as the thought came to him an airship pointed toward the rising sun (it was early morning) dropped with fluted body on the platform grooves and opened wide, receiving vents, into which loading chutes automatically fell. It was an inter-city freight ship—no other kind visited freight radial towers—and strange to the man, and for the moment he hesitated, half afraid. But if he were to seek re-entrance to the Cities, there seemed no other path to travel; so nerving himself he sprang aboard, and as he did so the chutes lifted, a brazen siren blared, and the vents noiselessly closed, smothering him with darkness and dust. Then with but the slightest vibration of its hull, he felt the airship rise and at increasing speed hurl itself eastward towards its destination.

The man rested; one hour, two; then the siren blared, the vents opened, and atop a moving surge of ore and

sand he was shot forth from dust and darkness into an inferno of flame and smoke. Somehow he managed to keep his feet, to escape burial under tons of debris, and when the dust settled and his eyes accustomed themselves to the lurid gloom, he perceived that he was in one of those mysterious places—a huge smelter, though he did not know it was that—where the Machine roared and hissed and held secret communion with itself. Often in the past he had gazed at such spots with superstitious awe, had knelt with other worshippers in religious supplication, but never had he dared approach too closely, for that was taboo and certain death. Even now, though he no longer worshiped, he was afraid; for withering blasts of heat hissed out from the fiery mouth of furnaces, and he was dazed and well-nigh deafened by the clangor and the clamor of automatic machinery.

It was a terrifying situation. How he made his way to safety he never knew. Desperately he dodged and twisted, and by what seemed almost a miracle won to the escalator, which picked him up with other loads and bore him away; so carrying him, at length, into territory he recognized.

But though familiar, this was not the territory of his clan. No one dared to live so near the sacred spots. He reached the aerial tube without encountering a soul. A voice (you knew it was no human voice, the timbre of it being too metallic) called out again and again a phrase too slurred to be intelligible. Cigar-shaped crafts with fluted sides to fit the landing grooves slid in and slid out with silent rapidity. One of these the man took. Before getting aboard he had glimpsed, in other compartments, people who stared at him wide-eyed, but his own compartment was empty. Being hungry and thirsty he pressed the necessary buttons and refreshed himself with food and drink, round cakes and condiments of various colors, and liquids both hot and cold. Scarcely had he finished, than the metallic voice called out another slurred phrase, the door swung open and he stepped from his compartment. Now there were several people who stared at him with eyes in which fear and suspicion predominated, and no wonder, for he was different from them, (not because of his nakedness; most of the people were partially naked also), but because his breechclout was of a strange, hairy material, and his skin swarthy, burned brown with sun and weather, and grimed with smoke and dirt. Now the skins of the other people were colored, too, but with a greenish pallor, the hue of those who live in houses and cities, under domes of protecting rays, and their loin-cloths and carelessly worn cloaks were of many colors, blue and red and green, or a combination of a myriad hues. So they stared at the man; and one of them, a truculent fellow in a yellow drape, whose dark brown-band proclaimed him an assistant to an Elder, cried hoarsely: "Now by the Machine, what is this we have here? Speak, fellow; of whose clan are you?" his fingers gripped the stranger's shoulder.

"Of the clan Rokka," answered the man, "and now if you please. . ."

But his inquisitor's hold only tightened. "Nay, since when have the clan Rokkans gone clad like this? And your skin. . . You are no Rokkan but an impostor."

The man wasted no time in debate. To be taken prisoner might be disastrous. He must reach those who (despite the changes of ten years) would recognize him. With a sudden surge he broke the grip on his shoulder and with a heave of both hands against his detainer's

chest sent him staggering backward. 'At the same instant he turned and fled. "Seize him!" cried his would-be captor, "seize him!" But the people pursued him only half-heartedly; despite the boldness of their leader, somewhat timid and afraid. Besides, the man ran swiftly and soon distanced them. From the landing groove could be seen immense buildings, the cables and spires of a great city. Up to his ears, fifteen hundred feet, came a subdued hum of traffic, the ceaseless voice of the Machine. Into a figure he rushed. "Halt!" shouted a man. But a vicious short-arm jab sent it reeling. With a tremendous leap he boarded a lift. Earthward the elevator plunged with a sickening swoop, a moving sidewalk bore him along, mechanisms ran this way and that, ceaselessly engaged in repairing, cleaning, carrying. They came ponderously or swiftly, and people avoided them as best they could. Sometimes a person slipped and was injured or killed. Then there came a device and bore him away. Perhaps some day the man or woman would return; perhaps they would not return at all; that was as the Machine willed.

"It is true," thought the man; "not our will, but the will of the Machine is done here. Man lives in the cities as his ancestors lived in the jungles. Instead of trees and rocks and forests he is surrounded by buildings of stone and steel, by whirling disks and wheels and driving pistons of which he knows nothing. The wild beasts of this mechanical jungle are the mechanisms that feed and clothe him, and at times devour him. Andro told me those things, and I perceive that they are correct."

Thinking these thoughts, he came stealthily to a deserted bathhouse, where he bathed and shaved and changed into new raiment supplied by tireless mechanicals. Wonderfully refreshed, he leaped aboard a low car that ran on a single cable, lurching, swaying, and so came at last to the home he had not seen for ten years. This home was on the third floor of a cavernous building. The building was really the dwelling place of all his clan, a structure of immense size and height, housing perhaps a thousand souls. Not all such buildings were inhabited, of course, and one traveled miles on the aerial tubes before finding another center of population to equal it. The rooms were large and bare. No windows gave illumination, but night and day they were lighted with a mellow glow and ventilated in a manner he had never understood. In passageways that honeycombed the walls and tunneled the streets, building and repair and service devices came and went, silent and rarely seen.

A woman was sitting in what was his particular private apartment, gazing into a mirror. She was young and lovely to look at, though past forty years of age. Her hair she wore shingled and its ruddy glow shimmered and changed color as she moved. She wore a garment of blue silk, and a drape of orange hue which gracefully trailed from her shoulders and was negligently clasped across the chest with a single strand of red silk. Despite her age, her figure was slim and boyish. Judging by appearances, her ancestors of a previous era would have called her a young girl. On her feet were gay little sandals ornamented with bright stones. Now, at sight of the man, she leapt to her feet with a startled exclamation. She saw in front of her a man clad much as other men she knew, but with a strange swarthy skin, startlingly white of chin and cheeks. He was, perhaps, fifty years of age. His ancestors would

have thought him extremely young for his years, but the woman thought him old. From the square, tanned face the grey eyes looked out searchingly. "Alva," he said softly. "Don't you know me, Alva?" The woman only stared, fear and amazement in her look. "Is it possible," he said a little sadly, "that ten years has made such a difference?"

"Ten years," murmured the woman unsteadily; and then with a little rush: "Oh, Jan, is it possible? But it can't be you! Jan is dead."

"Yes, Alva, it is I. The aerial tube was wrecked and all in it killed save myself. I was badly hurt. Look," he showed her certain jagged scars on his dark skin. "The people who lived near where I fell came to my succor."

"People," said the woman in surprise. "But if there were people, the Machine must have been there, too. Why did it not bring you back?"

"No," said Jan, "the Machine was not there—not in the sense you mean."

"But it is impossible for people to live beyond the Machine."

"That is what we have always been taught to believe, but it is not true. Oh, Alva, I have learned so much during those ten years, and now I have returned to . . ."

He was interrupted by the entrance of a tall handsome man from an inner chamber, clad in the customary gay clothes but without the drape, his skin gleaming greenly. The woman looked from one to the other in an embarrassed fashion, "Jan," she said, "this is Ton. When you failed to return. . ."

Sometimes jealous males fought. Her grandmother had had a dozen lovers who lived in harmony; her own mother, too; but customs were changing. Now as a rule men and women had but one lover, though there were exceptions and marital arrangements varied in the different clans. The High Elder of all the clans had declared monogamy to be the will of the Machine, and he ought to know, communing, as he did, with the Brain of the Deity. But Jan showed no anger. He extended his hand in the customary friendly salute, palm up, and with a smile said, "Greetings, Ton."

"Greetings," returned the other, though not cordially.

"I have not returned," said Jan, "to claim Alva from any lover who may have gained her affections. It was but natural she should think me dead and mate again. But my child. . ."

"Is not yet born," replied Alva: "nor will be for five years to come. The Machine took him the week after you left. Sometimes I go to peek at him in his crystal cell. He is growing finely."

Jan shook his head. "I had forgotten," he said. "From the egg to the fifteen-year old child! It is marvelous."

The woman stared at him. "What do you mean?"

"That the Machine should bear the child."

"But what other way should he be born?"

Jan did not answer directly. "In the desert," he said slowly, "I have seen women and animals. . ."

"Animals," interrupted Ton; "what are they?"

"Creatures that go on four legs."

Alva shook her head doubtfully. "Now you are jesting. Never has the Machine shown. . ."

"The Machine shows but this and other cities. There are no animals in the cities."

Alva looked shocked. "The whole world is a city. The Machine shows the whole world."

"Then why did the Machine fail to show me? You know the custom. Did you not seek for my face in the Hall of Pictures?"

"Yes," she replied, "but one day it vanished."

"Then I was dead and returned to the Machine. But I am not dead; I am here. Then where was I?"

Ton looked at Jan with a strange look. "Ah, where were you? Tell us that."

Alva drew close to Ton with something of superstitious fear in her eyes. While the three talked, other people had crowded into the room. Some of them had known Jan intimately in the old days. Each whispered to his neighbor that this mysterious stranger resembled Jan, but that his skin was strangely changed, never had they seen a skin of such hue, and his manner . . . aih, his manner. . . . Though he called several by name, they hung aloof, and several of them echoed Ton's query, "Aih, where were you?"

"In the outer world."

"The outer world?"

"The world outside of the cities."

A murmur of incredulity ran through the crowd. "What blasphemy is this? The man is mad!"

"No," cried Jan, "I am not mad; this is no blasphemy; you do not understand. You think the whole world is one vast city. You think that one city merges into another by means of the cylinders, the aerial tubes. That is because the cylinders are in the cities when you enter them, and in the cities when you leave them, and you cannot see. . . . I too once thought as you think, but the cylinder in which I was traveling fell—it fell into the desert. . . ."

"The desert?"

"A barren stretch of land near a mighty mountain range. . . ."

"Ho, ho!"

"And the people who lived there. . . ."

But now they drowned his voice with shouts of derision, of execration. "What foolishness is this? Does he think us children to believe . . ." and one of them exclaimed: "With what clan have you been hiding and why do you return with painted face?"

"My face is not painted, except by the sun."

"The sun?"

"You do not understand. You have never seen the sun. Nor snow, nor rain, nor stars by night. You do not know what I mean by night. The cities are shut away from the sky with their great domes of protecting rays. In the cities it is always day; and when you go from city to city you are encased inside of cylinders and never suspect that they are airships hurtling thousands of miles of mountains and deserts. O my people. . . ."

But now they surged in on him with a roar. Their taloned fingers caught at his cloak, tearing it away. "Silence, blasphemer! Silence! He denies the Machine! Down with him, down!"

Jan lashed out with his fists. One of the screaming mob was felled to the floor. Another reeled back with a noise gushing blood. But like a pack of wolves the remainder closed in and it would have gone hard with him if help had not come from an unexpected quarter. Ton, who had stood quietly by with absorbed face during all the above, now hurled himself forward with a shout. His flailing blows took the attackers in the rear; right and left he flung them. "Ho!" he cried, "back, back!" and with a bellow: "Is it for you to judge and punish? Nay, that is the right of the Elder. Now by the Machine. . . ."

They recoiled with sullen faces, breathing heavily. Jan lowered his arms. A ragged scratch showed on one brown shoulder, another on his cheek. "Do you forget," said Ton sternly, "that I am an assistant," he touched the dark band on his brow, "and claim this man as my prisoner. You harm him at your peril. Begone!"

They went, but with lowering brows and muttered curses. "To the Elder," they cried, "the Elder!"

"Aye," muttered Ton, "to the Elder." Alva looked at both men with frightened eyes. "Thanks for your aid," said Jan. The other shook his head forebodingly. "Do you still persist in this story of yours?"

"Yes."

"That there is a world outside of the Machine . . . beyond . . . ?"

"The Machine," said Jan steadily, "is built on the surface of a far larger world than the cities . . . a planet called Earth. . . ."

Alva gasped. "Ton, Ton, do not listen to him, he is mad, raving. . . ." She caught at him with imploring hands. "Believe nothing he says." Ton put her gently aside. "I have often wondered," he said musingly, "what might lie beyond our roof, our walls. . . ."

"There is a world," cried Jan, "as real as the world of the cities, but oh, so different!"

"I wonder," murmured Ton doubtfully. "As you know, our tellers of fantastic stories . . ." he paused. "But come; it is my duty to conduct you to the Elder." They left the room and walked along a wide, bare corridor. From every side curious people fell in behind them. A buzz of excited voices filled the air. Wild rumors ran from mouth to mouth. Most of the exclamations were of an inimical nature. "Back," cried Ton constantly, "back! In the name of the Machine!" But Jan walked the familiar way to the great council chamber with buoyant tread. He was not afraid. He remembered the Elder, a kindly man who had ever been his friend in the past. He was wise and intelligent, not like these foolish ones, and when he told him his story. . . . So he mused in his ignorance. But when he reached the immense council chamber and saw the sea of hostile faces, his heart misgave him. The disgruntled ones driven from Ton's presence had been before him and whipped up a dangerous public sentiment. Yet he strode boldly up the long room and it was only when he confronted the Elder that for the first time a chill of fear ran through his body. The Elder was a lean old man in a scarlet drape, with small fanatical eyes. He was the same man that Jan had known ten years before and yet utterly different. Jan was bewildered at the change. He overlooked the fact that ten years had passed, that he was now seeing the Elder with the eyes of one who had lived in the outer world. The stony gaze of the old man met his own without a vestige of recognition or of good will in them. The impulse to throw himself into his arms withered at the roots. "Your name," demanded the old man in a metallic voice.

"Jan, of the Clan Rokka."

"In the name of the Machine," he said, making the sign of the wheel, "speak—the Machine hears."

"An aerial in which I was traveling fell . . . it fell in the desert. . . ."

The voice of the crowd rose. "Silence!" cried Ton. "Those traveling with me were killed—but I survived. The people who lived in a nearby valley and who saw the aerial tube fall, came and bore me to their homes."

(Continued on page 1093)

# The Amir's Magic

By A. H. Johnson

*Author of "Phagocytes," "The Raid of the Mercury," etc.*

Illustrated by MOREY

WE were taking our "pegs" on the veranda of Watson's Hotel at Bombay when a bee or wasp flew near us with an angry "Buzz-z-z."

Although the insect did not come within ten feet of us, Sanderson ducked violently and seemed on the verge of precipitate flight. Sanderson was large, pink of face like the typical Anglo-Indian, and, up to the present, I had always thought him as void of nerves as we Americans usually assume our British cousins to be. Therefore, I was the more surprised at his agitation at the present moment, for the insect clearly intended no attack but was merely passing on its way to some of the tropical flowers near the walk.

I jokingly remarked to him that for a man who had been decorated "for valor" by his government, he showed unusual fright at a mere bee.

His sunburned face turned a darker red as he flushed slightly and muttered something about, "guess it will be some time before I can get over ducking when I hear a bee's hum."

Sanderson is connected with the Indian Secret Police, that ubiquitous order that has done so much toward holding Britain's far-flung empire for her, and he can tell many an interesting yarn when the mood strikes him. In his queer behavior at the present moment, I scented a story of more than usual interest, so I did not hesitate to question him.

He answered my question by asking another. "Do you know how we got our English word 'assassin'?" he asked.

I admitted that I did not, and he continued, "It is supposed to be derived from the name Hasan ben Sabbah, the 'Old Man of the Mountains.' Hasan was the leader of a small religious sect as early as the Crusades. After being a school companion of Omar Khayyam, the author of the Rubaiyat, he became dissatisfied at the position granted him in the Persian government and led his

band of religious fanatics into the wild country south of the Caspian Sea. There he seized the castle of Alamut and began the career of murder and terrorization that has made his name a synonym for unlawful killing to this day. His followers were drugged with hashish and then sent out on their murderous errands. Anyone that wanted an enemy killed merely agreed on the price with Hasan and the deed would be done. Hasan's men were never known to fail. In fact, it is said, that it was one of Hasan's men who followed Richard the Lion-Hearted to Europe and killed him there, Hasan having been paid for the crime by a Norman knight who was jealous of the King.

"However that may be, Hasan acquired great prestige in the East. The Oriental potentates were at once afraid of incurring his displeasure and anxious to make use of him to remove troublesome enemies, so wealth poured into his coffers. His band of professional assassins

became so influential that even after Hasan's death they were forces to be reckoned with in eastern politics for centuries."

I was disappointed. "But what has this history of an eleventh century band of assassins, interesting though it be, got to do with your being afraid of bees?" I asked.

Sanderson smiled and called to the khitmutgar (waiter) to fill our glasses again. Then, leaning back in his chair and lighting a cigar, he began:

IT was when this trouble with the Mahatma Gandhi was just beginning that I was called into the Kolwal (head police-office) in one of the northern provinces

and ordered to proceed to a small native state ruled by a Diwan called Shan Mer. You know, almost one-third of India is still nominally under the control of native princes. In the larger kingdoms each of these rajahs is subject to the supervision of a resident British officer; but, in the case, Shan Mer's kingdom had been quiet and

*MORE and more the study of certain insects is gaining a wider scope of interest among laymen, and their habits and characteristics are brought before the general public. And now some entomologists of standing warn us, in some measure, of the qualities, inimical to mankind, that some of these insects are developing— dangers that it might be very difficult to overcome. An effective expedient, almost unique in its simplicity, is suggested by our author in this amazing tale.*





*He waved a jeweled hand. "Wait," he said imperiously, "I shall neither be shot nor deported. You are going to say nothing to your government of, either my presence here or of my purpose."*

well-behaved for so long that the resident-official had been allowed to leave on a vacation. Most of these native principalities are bitterly opposed to Indian Nationalism because they know that it would mean the end of their own rule, and so we were extremely surprised to hear that the Gandhists were active in Shan Mer's kingdom.

When I arrived, I found that conditions were even worse than they had been reported. There were parades of nationalists, speeches by native agitators, and riots. Worst of all, I found that the Diwan was entertaining a guest, the Amir Khan Gopal from Afghanistan. There is an old Indian proverb, "Danger comes from the North," and it has always held true in regard to British Rule in India. We were sure that Gandhi was being backed by Russia, and when I was informed of the presence of this northern Amir, I did not doubt that he was at the root of the trouble.

I went to see the Diwan at once. He received me in a glass enclosed porch, what we would call a sun-parlor in England, and I was surprised to note that, although the weather was warm, all the windows were tightly closed.

We were seated on soft cushions, perfumed water-pipes and sweetmeats were brought in, and then the interview began. The Diwan assured me of his entire loyalty to the Sirkar (government), regretted what he called the "minor disturbances" that had taken place in his kingdom, and assured me that he had the situation in hand and that they would not be repeated. But though his words were friendly, I noticed that his manner was uneasy, and, in particular, he kept glancing around at his attendants as though he were afraid of being overheard. Thinking that he might be affected by some court intrigue, I determined to see him privately, and said, "Diwan, I have a secret message for you from the Sirkar. Let the room be cleared to leave us alone."

His attendants withdrew and immediately the Diwan's manner changed.

"Sahib," he said, "I rejoice in your presence. Your wisdom has freed me from what I believe to be the presence of spies among my own attendants. I know the Sirkar has good cause to be angry with me, but today I have less power than the meanest coolie in my kingdom."

"Who," I asked, "dares to dictate to the Diwan Shan Mer when he has the protection of the British Raj?"

"The Sahib knows that the Amir Khan Gopal is my guest?"

I nodded.

"But does the Sahib know that Khan Gopal comes from the 'Ruler of the Assassins'?" whispered the Diwan leaning forward excitedly.

"Who is this 'Ruler of Assassins'?" I asked haughtily, thinking it best to cover my ignorance by an assured manner. Then, speaking in a low voice, and apparently in momentary fear of interruption, the Diwan told me the history of the cult of Hasan ben Sabbath, much as I have told it to you, finishing with, "And, Sahib, this cult still exists in the country of the Afghans, and the Amir Khan Gopal is second in rank in their order."

"Why did you entertain this northern Amir without the knowledge of the Sirkar, Diwan?" I asked sternly, because it is a rule of Indian state-craft that no strangers of rank shall visit the native states without the knowledge and consent of the government.

"An Amir of the Assassins goes where and when he

pleases, Sahib," replied the Diwan superstitiously. "He may appear there today and a thousand miles away tomorrow. None may withstand their wishes without death."

"What does the Amir here?" I asked next.

The Diwan hesitated, looked anxiously around the room as though still afraid of being overheard, and then started to answer, "He preaches rebellion against the Sir—" when he heard the vicious "buzz-z-z" of a bee against one of the windows.

I give you my word, the man turned several degrees lighter. From brown he went to coffee-color and then to gray. He looked at the window where a large bee was buzzing as though it sought admittance, and I thought his eyes would pop out of his head. I have never seen a man more badly frightened. At the same moment, there was a fanfare of trumpets, the doors of the apartment opened, an enormous negro, naked except for a white loin-cloth and carrying a two-handed sword almost as long as he was, entered and announced the "Amir Khan Gopal!" in a loud voice. Immediately, preceded by four soldiers armed in the same way as his announcer, the Amir entered, lying in a palanquin, and followed by a retinue of attendants. One of the attendants, I noticed with astonishment, carried what seemed to be a glass hive of bees from which came the sound of angry humming.

The curtains of the palanquin were drawn back and the Amir emerged and seated himself on cushions near us. He was Persian or Arabian in race instead of Hindu, I would have said, and of most majestic appearance. His robes seemed to be embroidered in gold with conventionalized figures, some of which, at least, were evidently meant to represent bees. On the front of his turban was a small gold pin, so beautifully carved that it seemed like a living bee of gold.

The Diwan was evidently in the last extremity of terror and scrambled to his feet to welcome the Amir, adding to his title two words of an obscure Afghan dialect which I interpreted to mean "Bee Keeper."

THE entrance of the Amir, rudely breaking in upon a private conference of a representative of the Sirkar and an independent prince, was as great a breach of etiquette as it was possible to conceive, and so I made no sign of welcome but stared at him haughtily, concealing my astonishment as much as possible.

He selected one of the Diwan's hookahs without being asked (another piece of rudeness) and after two or three contemplative puffs on it, turned to me, completely ignoring the bowing and scraping Diwan.

"You would know what the Amir does here?" he asked in perfect English, repeating my question to the Diwan of a moment earlier, though how he could possibly have overheard it I do not know. His omission of the customary title Sahib (lord) was evidently a studied attempt to affront me, but I took no notice of it, merely replying quietly, "Such is my desire."

"And the Diwan here," he shot that dusky potentate a glance that made him squirm, "was about to tell you."

He took one or two deep draws on the pipe and then said with flashing eyes, "I shall tell you myself why I am here. It is to overthrow the British Raj! I am here to free India!"

I rose to my feet to terminate the interview. "Because of your frank statement you shall merely be de-

ported instead of shot," I said coldly, and prepared to leave the room.

He waved a jeweled hand. "Wait," he said imperiously. "I shall neither be shot nor deported. You are going to say nothing to your government of either my presence here or of my purpose."

I turned on my heel and took two strides toward the door. "Bring him back!" said the Amir to his attendants. Before I could put up any effectual resistance, two of the enormous negroes had caught me and were dragging me back before the Amir like a child. I was half mad with rage, for it is a deadly insult for a native to lay hands on a white man, and I cut at them viciously with my riding-crop which I had in my hand until they managed to get it away from me.

The Amir looked at me insolently. "You English think you are brave," he observed coolly, "but I think you are merely stupid."

"For example, the Diwan here, knowing what will be the result if he disobeys me, is ready to execute my least command. But, you, Englishman, do not know what will be the result of disobedience, so you resist me. I think, perhaps, I will see if I cannot drive fear into your thick head. Watch!"

He signaled for the glass bee-hive to be brought to him.

"So you are going to become a tamasha-wala," I said, contemptuously calling him a street-entertainer in my rage. "Perhaps you think I can be impressed by a garudi (snake-charmer)?"

The Amir's black eyes flashed, but all he said was, "At least, Englishman, I do not think you will be bored by my entertainment."

He gave a shrill whistle and all the bees in the hive became quiet. Then he noticed the bee that was still buzzing against the glass of the window. "Ah," he said, going to the window, "one of my little friends is outside."

He opened the window and the bee flew inside the room, lighting on his hand. He lifted his hand almost to his face and seemed to talk to the bee in Arabic. Then he opened the glass hive and the bees flew out and began to cluster on his hand.

"Do you think you can impress me by such mum-mery?" I asked scornfully, although I was really considerably impressed by the fearlessness with which he handled the insects. "There are thousands of men in my country who can do as much."

The Amir smiled. "Have the Englishman's horse and sais (groom) brought into the garden under these windows," he said to an attendant. My horse was brought, accompanied by Gan Singh, my faithful sais, and the sole attendant with whom I had made what I now realized was a perilous journey.

"Now, Englishman," he said, "how many men in your country can do this? And how many bees in your country can do this?"

He ordered the bees back into the hive, speaking in Arabic, and to my astonishment they went, all except one, which remained on his hand. Then he walked to the window, pointed out my horse to the bee, just as he might have pointed it out to a man, said, "Go! Kill! And then return," in Arabic, and opened the window.

I started a laugh at such absurdity, but the laugh froze in my throat and my hair rose on my head. *The bee flew straight and true toward the horse, lit on it, and must*

*have stung it, for I saw the poor animal rear frantically. Then, without the least hesitation, and just as if it were a person obeying orders, the bee flew back to the Amir's hand.* He replaced it in the hive, while the Diwan and such of his attendants as had entered with the Amir, gave grunts of the most profound awe and astonishment.

"Watch the horse," said the Amir quietly.

I watched. Surely the sting of a bee could not be fatal to so large an animal as a horse, I thought. The horse had reared and plunged so hard as to break away from the groom for a moment, but now he was quieter and Gan Singh had him by the bridle again. Nothing happened for some moments. Then, I saw a convulsive shudder run through my poor beast, and he fell to his knees. The next moment, he was lying quite dead on his side.

"May Vishnu, the Preserver, save us," exclaimed the Diwan.

I attempted to shake off the feeling of profound awe and amazement that was descending upon me. "You have poisoned my horse and are merely staging this elaborate show to impress me," I shouted, more to bolster my own spirits than because I really believed it.

"Call your sais," said the Amir.

I called him, and he left the horse at which he had been staring in astonishment and came into the room.

"Gan Singh," I said, "has my horse been out of your sight since we came here?"

"No, Sahib," he answered, and I knew he spoke the truth, for Gan Singh and I had seen many a rum affair through together.

"Has any one given him food or water?" I asked.

"No, Sahib," answered he, "until he was stung just now none have touched him, and no food or water has he had since I, myself, tended him this morning. Ayie! And now he is dead! It could only have been the work of witches!"

"Would you like another demonstration?" asked the Amir. Then, with a glance first at my sais and then at the terrified Diwan, he continued, "If you still doubt, I will be glad to illustrate that your groom or the Diwan will fall as readily as a horse before my little winged friends, or as perchance I will prove later, you yourself, are not immune."

He again signaled to an attendant who approached with a basin, water and a small silver-chased box which contained three bottles. The Amir selected one, and washed his hands, pouring some of the contents of the bottle, which evidently contained perfume, over them, and then turned to me again.

"You of the West," he said with a slight smile, "think that you are infinitely superior to the East in scientific knowledge, but, as in so many other things, this belief merely indicates your colossal ignorance. We of the East have devoted ourselves to the study of the mind and soul, leaving the grosser and more elementary subjects of what you call science to the Western Barbarians. Yet, even in your own subjects, we can far surpass you when we desire. Where in the West is a man who could do what I have done, Englishman?"

I said nothing, for, indeed, there was no answer that I could make.

The Amir puffed contemplatively on his water-pipe.

"Englishman, you shall be lodged here in the Diwan's palace for the time; and do not seek to leave it. I have a future use for you. Remember that the knowledge



of the West is as nothing in the face of the knowledge of the East, and that before me you are as a little child."

He turned to his attendants. "Take him away! Let the saib be lodged with the palace servants and taught the tenets of Indian Nationalism that he may carry the seeds of revolt to his native village in time."

TOO stupefied at what had occurred to make any resistance, I was led away and lodged in a sumptuous suite of the Diwan's palace. Once alone, I lay down on a broad divan and let my thoughts run wild through my brain. What I had seen was impossible, and, yet, I had seen it. For a time reason struggled with memory. A man talk with a bee! Nonsense! It was absurd on the face of it. In our well ordered world, where cause must invariably precede result, such a thing simply could not occur. And yet, it had occurred! I sought to remember all I had ever heard about bees. I remembered that the authorities were practically unanimous in saying that they were entirely dominated by *instinct* as opposed to *reason*. Yet, could they be wrong? The wide abilities of the bees were recognized even by the ancients. They were widely spoken of in the Bible. Charlemagne had used them as an insignia and had them embroidered on his robes. Even the pagan writers had extolled the wisdom of the bee for centuries, and superficially, at least, it certainly seemed that they were right. For, in proportion to its size, the bee builds greater buildings than man. It has a social system of a ruler, workers, warriors, and drones, which works fully as well as man's social systems. And individual for individual, the bee has much greater patriotism than man, for every bee will give his life, if necessary, in defense of his community. The bees care for their young, communicate with one another, aid one another in procuring food. In fact, there is not one activity of man that has not its close analogy in the life of the bee. Why should we say that an insect that exhibits such abilities has no intelligence? None of the so-called domestic animals, the dog, the horse, the cat, or any of the others show one-tenth of the wisdom of the bee. Yet we know that the dog and horse can be trained to aid man. Could it be possible that bees were possessed of individual intelligences approaching that of man? But able to understand the human language—that was the hardest thing to believe! A dog can understand a few words of command and so can a horse, but the Amir had spoken several times to the bees and they had obeyed!

Feeling that my reason was slipping, I arose and paced the room in my agitation. Desperately, I sought for some reasonable hypothesis that might explain what I had seen. There was none. Then, slowly, my mind slipped from my individual problem to thinking of what would be the result of the failure of my mission, for I did not doubt that I had failed. With the Diwan under the domination of the Amir, the kingdom would become a hotbed of revolt. India was in a dangerous state. If once thoroughly aroused, her teeming millions could push the few thousands of Europeans into the sea almost without an effort. The continuance of white supremacy demanded that all trouble be nipped in the bud. The spark from this tiny principality might be all that was needed to cause an explosion that would sweep over the whole country.

For hours I was alone with these thoughts. Food was brought me, murgli (stewed fowl), tea without sugar,

and several native dishes; but I was too disturbed to eat. It became dark outside, and gradually my mind was clearing and I was beginning to be able to apply the laws of reason to the situation when I was attracted by a low scratching at the window. I opened it and my saib glided in as silently as a snake.

"Sahib," he whispered, "I have news for you. I have mixed freely with these northern dogs and let them try to 'instruct' me in treason to the Sirkar. May Siva destroy them everyone! They intend the Sahib's death tomorrow morning by the same magic of the bees that killed the Sahib's horse today! There is to be a meeting of these Gandhi's dogs. Without doubt all the coolies and base-born of the kingdom will be there. This northern wizard will harangue them. You, Sahib, will be brought there, and the wizard will pretend to give you a chance to answer the charges of misgovernment that he will bring against the Sirkar. But Sahib, if you speak, he will loose his magic on you, and you will die even as the horse."

The faithful fellow half drew a knife from his waist-cloth, and continued sibilantly, "I can cut the throat of the hill-devil that stands without your door, or the Sahib can leave by the window. The palace walls are guarded and the chance of escape is small. Still, a man can but try! Let the Sahib command!"

For a moment I fell into deep thought, then the ideas that had been vaguely floating in the back of my mind for hours suddenly lined up in clear order as I remembered one additional fact. Disregarding, for the time, the saib's suggestion as to escape, I turned to him and fired a sudden question.

"Gan Singh," I said, "tell me, and by the honor of your ancestors, speak the truth and forget nothing. Tell me, did none approach and handle, or throw anything on my horse this morning?"

I waited anxiously while the native hesitated before replying. On this answer, as I believed, hung not only my fate but possibly the future of British Rule in India.

"Sahib," he answered slowly, "it was as I told you. None fed or touched the animal. I left it for not a minute——"

My heart sank into my boots, but the saib had not finished.

"But," he said, "I held the horse near the wall and a gardener, passing along the wall, watering the flowers did sprinkle water on the horse's croup——"

I could have shouted for joy.

"Gan Singh," I said, "I know thou art loyal to the Sirkar. But would you risk your life for the Raj? If you succeed, there will be rupees for you without number and much honor for you and even to your children's generation."

"Sahib," replied the saib, "I have eaten the Sirkar's meat and salt for many years. Only a hill-devil would be untrue to his salt. My life belongs first to you, Sahib, for you employed me when famine swept my village and I and all my family would have died else. And after you, Sahib, I serve the Sirkar which has brought peace and banished the famine that formerly swept over our country. So, not for reward, but to serve you or the Sirkar, there is nothing I would not undertake."

"Thanks, Gan Singh," I said, "you speak as a man! And if we both escape, I shall see that you do not serve without reward. But, now, to business. Did you notice



the silver case from which the Amir drew a bottle and washed his hands?"

The sais nodded.

"Gan Singh," I said, "steal that case, bring it here for ten minutes, and then return it, all without the knowledge of the Amir; and, I, and the Sirkar, will be forever in your debt. Think you it can be done?"

"The Amir is a mighty wizard," he replied, "to oppose him without magic is useless—"

"Ah," I cut in, "but, Gan Singh, suppose I also have magic?"

"Then, we shall escape safely," he answered, "I go." And he left by the window as silently as he had entered. Two hours later he was back with the silver-chased box in his hands. "Ha!" he said, "these northerners sleep heavy. One might steal their very turbans from their heads without awakening them."

I busied myself with the three vials for a few minutes, then returned the box to him. "Now," I said, "if you can replace it as easily as you took it, all may be well." He vanished for the second time. I lay down and prepared to get what rest I could, for I was sure that tomorrow I would need all my strength. But before I dropped off to sleep, I remembered something and rose to fumble in my luggage for a few minutes. I took a complete suit of outer clothing that was very similar to the garments I wore and hid it under some cushions in the room. Then I got into my pajamas and left the clothing I had been wearing carelessly on a chair. Finally, I slept.

THE next morning, I awoke, saw that my clothing and luggage had been disturbed; and, after making sure that I could not be observed, I put on the clothing I had hidden, and hid the garments I had worn the previous day. Then, I sat down to await events with what equanimity I could. A good breakfast was served me, and I did not hesitate to eat heartily of it. I was hoping for some word from Gan Singh, but none came. Well, it was on the lap of the gods. I would have to hope that he had gotten through all right last night. At least there had been no disturbance to indicate his capture.

One of the windows of my apartments overlooked the entrance to the palace and from ten o'clock on I saw a continuous stream of natives entering. From their appearance, I judged them to be the head men of the various villages in the Diwan's kingdom, petty nobles, and, in general, the leaders who came in direct contact with the mass of the people. What these men decided on, the mass of the people would do, and, for the most part, I knew them for an ignorant, superstitious lot who would be easily influenced by such an awe-inspiring leader as the Amir. Outside the palace gates, I could hear the sounds of a gathering crowd. There, I knew, would be the mass of the people, the coolies, the "base-born," as Gan Singh had called them. They would be ready to wildly cheer any decision that the petty nobles made and carry action to any extreme; doubtless there were agitators paid with northern gold who were even now circulating among them.

Perhaps an hour passed, and then an escort of soldiers from the Amir's guard came for me. My riding crop was gone, but there was a light swagger stick in my luggage and swinging this with as much nonchalance as I could muster, I moved off between them. I was con-

ducted to the large council-chamber of the palace. Here the Amir and the Diwan, with a few attendants, sat on a kind of raised dais facing the head men and officials. The Amir was speaking as I entered, and was conducted to the platform. One of his attendants carried the glass hive of bees.

"People of Shan Mer," he was saying, "long enough have the English ruled India. Heavily have they oppressed the country. Now it is time to throw off the foreign yoke. The English are few. You are many. Arise in your might, and sweep them into the sea. Kill them! Kill the Sahibs, kill the Mem-Sahibs, (European women), kill the children! Let not one escape. Take vengeance for the years of oppression. Strike! You need not fear defeat. I am here to promise aid from the north. The hill tribes gather around Peshawar. They will hold the troops of the Sirkar while you act here. A mighty country to the north favors your cause and will send money and aid to you. I am here to lead you. In the shelter of my magic, you need fear nothing."

Here the Amir noticed my entrance. He pointed to me. "Here is a representative of the Sirkar. Let him answer my charges if he can. Then shall I demonstrate the strength of my magic on him, a Sahib. Let the Englishman speak!"

A deep and hostile murmur went through the crowd as I turned toward them and commenced to speak. It was clear that the harangue of the Amir had had a profound effect.

"People of the Empire of India," I began, "listen not to the words of an Afghan Amir. Remember the stories of your fathers of the times before the British Raj. Then famine walked in the land so that there was never food enough for all. Each state fought against its neighbor and seldom was there peace. When men escaped the famine it was only to be killed in the wars of Rajah against Rajah. Then came the British Raj, and there was peace and plenty for all.

"The Amir has told you that the hill tribes gather around Peshawar. It is true. But they come as your enemies, not as your friends. Only the troops of the Sirkar prevent them from raiding your cities as they did in bygone days. When has an Afghan hill tribe been friendly to the people of the plains?"

I heard a murmur of assent at this shot and knew that it had told heavily, because the Diwan's kingdom had been one of those raided by the Afghans in the past. Trying to take advantage of this feeling of friendliness before it evaporated, I went on, "The Amir says that he has a powerful magic, with which he proposes to kill me. I say that the magic of the Sirkar, which I have, is much stronger magic, and that it is the Amir who will die. Let the Amir use his magic. I defy him!"

There was a dead silence in the great hall after my statement. Then the Amir rose with flashing eyes and signaled to his attendant to bring the hive of bees. "O people," he shouted, "see how my magic shall destroy the Englishman!" And he picked up the hive of bees which began an angry humming. I saw the Diwan's face go almost white as did that of several of the guards and attendants who had seen previous exhibitions of the Amir's magic.

The Amir spoke to the bees and pointed me out, ordering them to kill me. The humming increased.

"It is your own death that you are preparing, Amir," I shouted.

He smiled contemptuously, and spoke to the insects. "My little friends," said he, "Go! Slay this Englishman, and prove to the people of Shan Mer the power of my magic!" The bees seemed to answer with a higher-keyed, more vicious buzzing.

Then, with a dramatic gesture, the Amir flung the box wide open and the bees swarmed out in a buzzing cloud. I heard a simultaneous gasp of fear and astonishment from the audience, and everyone in my neighborhood took to his heels. I, myself, gave back a step or two. But not a bee moved in my direction. Instead, they were all swarming over the Amir's hands. Never have I seen such an expression of fear and astonishment on any man's face. Then he gave a scream of pain that almost made me sympathize with him, rascal that he was. He attempted to shake off the bees from his hands—tried to run. But he had taken only a few steps before he fell unconscious on his face.

I boldly walked up to his attendant and removed the silver box that contained the three bottles from his now nerveless grasp. Selecting one of the bottles, I opened it and set it in the hive. In a few moments, the bees began to leave the Amir and flew back into the hive. Once they were back I closed the lid with a great feeling of relief. The Amir was quite dead, and his hands were horribly swollen.

Naturally, after that, I didn't have much trouble convincing that crowd that it was wise for them to be loyal subjects of the Sirkar. After seeing what he had, the Diwan fell at my feet and begged forgiveness, offering to carry out my least order. I had him take the Amir's attendants in custody and confine them in the palace jail. He offered to have them boiled in oil, but I preferred to hold them for trial and questioning by a special court.

The headmen and officials went out of there and talked to the crowd outside, and the crowd that had expected to shout, "Down with the Viceroy! Death to the Sahibs!" went away cheering the Sirkar, and shouting against the hill tribes and all Afghans.

I found Gan Singh was all right, and in a few days, as soon as the situation had quieted down and there was a resident British Officer with a squadron of cavalry to see that it stayed that way, Gan Singh and I left. He got more rupees than he could count and I got a promotion and nice things said about me by my superior officers.

SANDERSON stopped talking as though the story were finished.

"But, Sanderson," I said, "How did you do it? You don't think I am going to let you get away without hearing how you did it, do you?"

"Can't you guess by this time?" he asked with a twinkle in his eye, for he especially likes to puzzle his audiences.

"No," I said impatiently, "tell me."

"Well," he said, "it was all pretty simple. You see, as soon as I got my wits back, I knew there must have been some more explanation of the bees' acts than the Amir's directions to them. In other words, I knew that they would have acted just the same whether he had

spoken to them or not. Then I tried to think of some means that would have caused them to do what they did, and I remembered a course I had taken in Entomology. Insects have very keen powers of smell, and, in fact, are largely guided in their conduct by such powers. If a strange bee comes to a hive, the bees that live in the hive will kill him. But, if he manages to get in the hive, he acquires the hive smell in a short time and after that he is accepted as one of the community. On the other hand, bees like certain odors and will always alight on a surface covered with such an odor if possible. Also, there is a species of bee or wasp that is a deadly enemy of the average bee and bees can detect their approach at a considerable distance by smell. When they catch this scent they all dash out and attack the invaders. In fact, they will attack and sting violently almost any thing that has the odor of this 'robber-bee' or wasp. After I remembered this, it was easy to guess that the Amir merely used some substance that smelt like the 'robber-bee' to coat any animal or person that he wanted stung. It would not be by any means impossible to make such a preparation. Possibly he prepared it from the bodies of the 'robber-bees' themselves.

"That was the reason I was so anxious to know whether or not anything had been poured or placed on my horse. When I heard that it had, I was certain that I was right. And I knew that if the Amir intended to kill me, he would put the stuff on my clothes, so I was careful to wear only the clothes I had hidden, but which looked just the same as the suit which I am certain the Amir had perfumed with the odor of the 'robber-bees' during the night. Then, when the Amir had washed his hands with stuff from one of the three bottles in the silver box, that had given me a clue, too. Evidently one bottle contained a perfume that would merely attract the bees, and which the Amir used on his hands to make them light there. Another bottle contained the perfume of the 'robber-bees.' For a while the third bottle puzzled me, but soon I guessed that it must be some deodorant substance that would completely neutralize either of the other two odors. So when Gan Singh brought me the box, I merely switched the contents of two of the bottles and washed my hands with some of the liquid in the third.

"Then, the next day, when the Amir was ready to turn the bees loose on me, they attacked him instead, because he had the wrong odor on his hands. You see bees can smell thousands of times better than people, and the Amir couldn't notice any difference in the odors, so he used the wrong one.

"It seems to me that's about all. Oh yes, why was the bee's sting deadly enough to kill? Because it was *poisoned*.

Yes, I know that it sounds very absurd to a westerner, but it's no harder to poison than a hypodermic-syringe. Of course it was dangerous! But after you have seen one of these fakirs gaze steadily at the sun until their eyes are put out, or lie on a bed of nails until they have sunk deep into their flesh, or hold an arm in a certain position until it rots there from atrophy of the muscles, you will know that these fanatics don't stop at a little danger when they have a point to gain

# The Cities of Ardathia

By Francis Flagg

(Continued from page 1085)

"Who were these people?" asked the Elder.

"Human beings such as ourselves. Long ago they had lived in the cities, before the ancient Titans drove them forth. . . ."

The icy glance of the old man quelled the clamor. "Speak," he said softly, "the Machine hears."

"For the first time I saw the world outside the cities and I was afraid and thought I had died. But the strange people bore me to their village. How can I explain things to you? At first their speech was strange, but soon I discovered a certain similarity between it and mine. A young girl taught me their language. Her name was Greta. I married her later." He paused. "And her grandfather also instructed me. His name was Andro. 'Who are you?' I asked him. 'What is this strange world into which I have fallen? By the will of what Machine do you live?'"

"We are descendants of the Unlings," he replied, "who were driven from the cities five hundred years ago when the Titans had no more need of them. As for this village, it is in the outside world that holds even the cities from which you have come." And then he proceeded to tell me how the cities had been built by man, and the Machine. 'The Machine did not make man,' he said; 'man made the Machine,' and he showed me in a book. . . ."

But Jan got no further; for the bent figure of the old Elder straightened, the small fanatical eyes suddenly flashed with lurid flame. "Enough!" he thundered in a high shrill voice: "The man blasphemes! Seize him! Seize him!"

Jan started back with clenched fists. "Wait," he cried; "Listen!" but his voice was drowned by howls of execration. "Liar! Blasphemer!" The crowd swirled forward. He heard Ton's voice screaming: "Back, back!" but whether in an attempt to aid him, he did not know. Then the mob was upon him. Ton was swept away. He never saw him again. It was hopeless to fight and yet he fought. The very numbers of his attackers aided him for a moment. Right, left, right, left. His fists smashed into muzzling faces. Men went down under his blows. Through them he plowed, for a few yards. If he could only reach the door. . . . But hands clutched at his ankles. Stumbling, he went down, and a mass of cursing, sweating humanity went down on him and crushed him into submission. A few minutes more and, arms bound, he stood again before the Elder who eyed him with cold malignancy.

"You have spoken," said the lean old man, "and the Machine has heard."

"The Machine has heard," chorused the people.

"As for the wild things of which you have told, surely they are the ravings of one dead. Long ago the Machine took you to itself, and that land of which you speak is the place beyond death. But by the powers of evil, the Not machine, you have been returned to curse and blasphemy. The mark of Nothing is on your brow, the hue of Nothing on your skin."

"Ahram! Ahram!"

"Ahram! Ahram!" shrieked the people. The words of the Elder swept them into an ecstasy of fear and hatred.

"This is nothing that lives," shrilled the Elder. "It is dead, dead!" And then with an uplifted and skinny hand that compelled silence, he hissed:

"Away with him! Away with him! He had escaped from the Machine; let him be returned to the Machine!"

*Returned to the Machine!* The blood chilled in Jan's veins. He knew what that phrase meant. But powerless to resist, he was swept from the room by the tumultuous mob, and so to the street. Moving sidewalks hurried them forward, cable-cars swung them along, and at last they came to the gloomy spot beneath a spider-web of girders where the Machine bared its vitals to the gaze of man and a great black piston went up and down. Here was the burial spot of the clan, the place where the dead were brought to be "returned to the Machine." Jan struggled for utterance, made one last effort to avert his fate.

"Fools!" he cried, "fools! I returned to enlighten and uplift you with the truth. I thought to tear from your eyes the veils of superstition and ignorance, to lead you out of darkness into the light of day! Listen. . . ."

But they howled him down.

"Too late," he muttered, with bowed head. "Nothing can save them: I see that now. As savages they will perish in a mechanical world; but after them the seed of the Unlings will pour into the deserted cities, the strong, enlightened ones from the outer world, some of them with my blood in their veins; and the marvel of the Machine will come under their dominion, and the age of man as gods on earth truly begin."

So he thought; and then with a surge of sadness, "But I shall never see it."

His body swung forward; he saw his surroundings in one last blur of consciousness—O for the blue sky under which to die!—and then the piston fell.

"Ahram! Ahram!" shrieked the frenzied crowd. After a while, one by one, they wandered away; and the great piston went monotonously up and down; but now its black smoothness was flecked with blood.

THE END

# The Light from Infinity

By L. A. Eshbach

*Author of "A Voice from the Ether" and "The Valley of Titans"*

**M**YSTERIOUS occurrences on this earth, apparently caused by cosmic phenomena—occurrences which sometimes leave destruction in their wake and often seem of no particular significance—wait on their solution, or reasons based on fact, until such time as astronomers, or other men of science, are enabled to travel beyond our so-called Heaviside layer. As long as these men must depend upon their man-made telescopes—remarkable as they are today—they cannot be assured of the truth. L. A. Eshbach needs no introduction to science fiction fans, but we do say, unhesitatingly, this is an unusual story.

## CHAPTER I

### The Coming of the Light

**W**ITH a great, rushing sound like the roar of a mighty cataract, a stream of yellow fire leaped suddenly from the base of the awesome *Rocket* and spattered the ground with a shower of golden stars. For the smallest fraction of a fleeting second, the shining, parminvar-beryllium projectile, sharply outlined by a battery of searchlights, seemed to shudder on its supports; then with a titanic shriek that mounted in a great crescendo, it hurtled into the sky.

With amazing velocity it sped upward toward the bright disc of the moon, moving so rapidly that in a few moments its tail of fire had become a huge, yellow star. This, in turn, grew smaller and smaller, until it dwindled to a minute point—and vanished. The first space-ship had begun its maiden voyage.

A great sigh as of the sharp exhalation of bated breaths arose from the sea of upturned faces. Then cheer after cheer burst from the milling, swirling thousands—cries of praise and godspeed for the three daring pioneers into space.

It was only a matter of moments after the vanishing of the *Rocket* that it was sighted again as a flashing meteor, far out in space. Moments, until the great telescopes of the northern hemisphere were trained upon it. Long they followed its flight as it held its course toward the moon; but at last even the astronomers could not see

its light; it vanished in the radiance of the disc that was its destination.

Then, when astronomers were about to turn their telescopes toward more interesting portions of the heavens—the Light came! Then, as though it were a carefully planned act in a cosmic drama, with the populace of North America and Europe for spectators, the balefully gleaming beam of red flashed from the depths of interstellar space, and struck the moon!

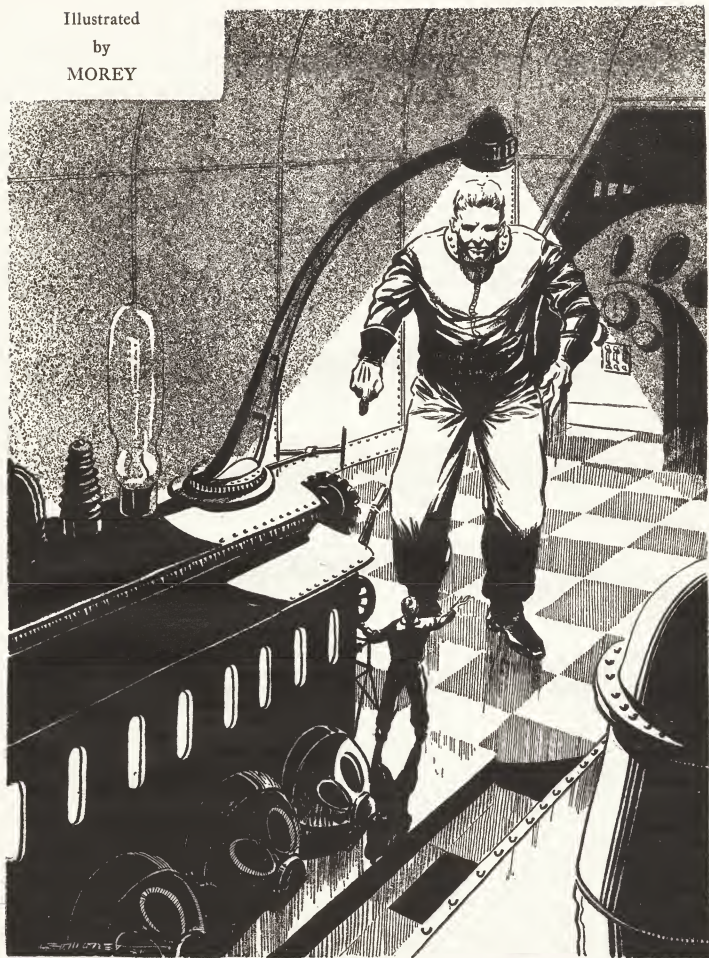
A giant pencil of vivid crimson, all of two hundred miles in diameter, it was, like a beam from some titanic, interstellar searchlight. After the first shock of its strange appearance, astronomers sought to follow the beam to its source. They could not! Even the largest telescopes were ineffectual—the red pillar of light extended on and on until it vanished as a minute point in the fathomless reaches of illimitable space.

The voyagers into the void were forgotten then, the magnitude of their venture overshadowed by the greater wonder of the crimson enigma. The people of Europe and America, when they saw the beam—it could be seen with the naked eye as a long needle of light reaching out into space from the upper portion of the moon—at first had associated it with the *Rocket*, but when puzzled astronomers began voicing their wonder, mankind came to a sudden realization that a phenomenon, strange and inexplicable, was occurring. So, where a short time before, the attention of the world had been directed toward the *Rocket* and its passengers, interest was now centered upon the needle of light.

According to the observations of the men of science,



Illustrated  
by  
MOREY



*"Just a minute, Dave. Here, help me to get small." He gave Narcott directions concerning the manipulation of the 'diminishing ray. "Be careful," he admonished, finally. "I don't want to shrink out of sight."*

the beam was directed toward that portion of the moon that was called the Alps Mountains, at a point midway between the craters, Aristotle and Plato. It remained fixed to that one spot, a motionless, unwavering pillar of radiance, whose length had to be measured—if it could be measured—in light years!

It was less than an hour later on that same night that astronomers became aware of the strange antics of the moon. A dispatch from the Yerkes Observatory informed the people of the world that Luna had begun to sway erratically. Swaying—like a ball at the end of a string! With eyes turned toward the sky, tense humanity waited.

At ten o'clock on the night of June 11th, the *Rocket* had left the earth; at ten forty-five the moon had begun its strange lurching; at eleven thirty the most startling intelligence of that momentous night was given to the world by means of radio dispatches sent out almost simultaneously by the largest of the observatories in the northern hemisphere.

The moon had left its orbit and was speeding away from the earth!

Almost immediately a second report corrected the first: the moon had suddenly stopped short in space and was hanging motionless—and earth was speeding away from her satellite! The world gasped incredulously.

On the following morning, the morning of the 12th of June, the front page of every newspaper was given over completely to news of the moon's madness and of the light in space. The more conservative publications dealt with the facts as given forth by the observatories; the sensational papers, the so-called "yellow sheets," on the contrary, were filled with fantastic theories and wild conjectures. Invaders from a dark star; beings from the heart of the moon, tearing their world from the earth to wander through space, preying upon other heavenly bodies; earth's nights grown black and cold through the loss of her nocturnal luminary—these and other fantastic theories, equally inaccurate and impossible, were featured. Yet beneath it all, fact and theory, there was an undercurrent of vague dread and foreboding—as though men sensed in some way the horror that was to follow.

Days passed by, merging into weeks—and the moon grew constantly smaller, the light she shed on earth decreasing proportionately. At the same time there was a noticeable diminishing in the distance that the tides rose and fell. Likewise, astronomers announced, the orbit of the earth had changed slightly, due of course, to the altered position of the moon. Aside from that, the crimson beam that had stolen Luna, had no effect upon the earth.

As day followed day, with nothing of a sensational nature occurring, mankind began to lose interest. A series of daring robberies in Denver; a devastating fire in Miami—and news of the moon was relegated to the background. Occasionally, some newly published theory aroused a flurry of interest; occasionally, a question was raised as to the probable fate of the men in the *Rocket*—but on the whole, the moon became a subject of minor interest. Humanity had returned to its ways of humdrum normalcy.

terror began on earth. It was instantaneous, without warning, without sound—the coming of the crimson annihilation from the moon!

Two o'clock in the morning of July the 4th. A grim jest of Nature—Independence Day become the day of earth's enslavement! A sudden suggestion of red light near the lower edge of the dark portion of the quarter moon—the light spreading in a flash—and leaping toward earth, striking her surface instantaneously.

Astronomically it was recorded as the appearance of a bright light in the center of the Lunar crater, Tycho, a light that rapidly filled the entire pit—and flashed through space with the speed of light.

An attempt to describe the results of the crimson beam's collision with the earth reveals the utter futility of words. A series of titanic earthquakes, shudders of a wounded world; the drunken swaying of captured earth, a swaying that rocked great cities to their foundations, striving to complete the destruction that the quakes had begun; and worst of all—the crushing!

The power of the Light seemed directed along two contradictory channels. It held the earth, suggesting a gigantic magnet; but at the same time it crushed everything that lay within its confines, pressing them into the ground. Inconceivable was the power of the beam—a tremendous force of unlimited potentialities.

The Light struck the earth in the heart of Germany, obliterating instantaneously the cities of Hanover, Linden, Hildesheim, and Brunswick, as well as several smaller towns and villages. And as the earth turned on its axis (although the earth's motion along its orbit ceased with the striking of the Light, it continued its axial rotation) the stream of force blazed a fifty-four mile wide, twisting trail across the globe. It was as though some giant finger of death and destruction were dragging itself over the face of the earth.

That was a time of tragedy, of stark terror and bedlam. Disaster! Science groping in impotence! The reason of mankind tottering on its throne.

The erratic swaying of the earth as it dangled from its brilliant, crimson thread, made impossible any calculation as to the course the beam would follow. A slight swaying of the globe—and Chicago and its environs were crushed flat. Another shift, and a queerly blank, dead-flat surface of empty earth led into northern Canada, crushing as it went.

Flight, the universal impulse—yet men feared to flee lest they unwittingly enter the path of the dreaded Light.

And then, with terror at its height—it was the evening of July 5th—came the second menace. A report from the Flagstaff Observatory, immediately corroborated by the Licks, Yerkes, and Mount Wilson Observatories, gave the astounding news that earth was returning over its orbit, hurtling toward the moon with incredible speed—that the pillar of light between the two spheres was growing shorter, pulling the earth toward the lesser globe—that, unless some cosmic miracle intervened, the two bodies would collide, and life would be extinguished in the blaze of a newly born sun.

Universal lamentation, horror and panic spread like a plague. Humanity fleeing in blind confusion. The thin veneer of civilization stripped from man, baring all that was bestial and craven, and conversely, all that was pure and fine. Iniquity and crime rampant; yet churches filled to overflowing.

SUCH were conditions when, almost a month after the appearance of the Light in the sky, a reign of

But evil, the offspring of death and fear, dominated. A wild frenzy had fallen over the world; men fought in the streets—and died in madness. Orgies unmentionable, insane riotings, pillage, rape, murder—it was the day of civilization's downfall.

And science could do nothing to remove the menace. Mankind was helpless.

As day followed day, each growing longer as the earth's rotation was slowed up by the action of the moon, with no sign of relief in sight, the populace of the world for the greater part reverted to the brute. Fortunately, however, there were some with stronger minds who saved civilization from complete obliteration at its own hands.

Among these were the scientists, trained thinkers who, though at their wits' end, sought frantically for a means of escape for man. But even they despaired when at last the moon had come so close as to blot out half the sky, and the problem was still unsolved.

For then, a third source of danger was added. First, the crimson beam; then the moon menace; and finally—the tides! With the moon at such close proximity to the earth, the tides were drawn to mountainous heights. Cities on every coast completely covered by water; islands submerged; coastlines changing as strips, miles wide, were washed away. Slowly the seas crept toward the hearts of the continents.

But little attention was given to this last form of destruction. Too much had been happening in too short a time; the mind of man was stunned, blinded with terror.

And finally—the climax! On July 10th, just six days after the coming of the light from Tycho, came the end. Brilliantly gleaming Luna, a vast disc of white that covered the sky, held by a pillar of crimson—Luna, the destroyer—seemed close enough to touch. Earth had almost stopped rotating on her axis; her waters were piled mountain high, covering the greater part of Eurasia and Africa. The Atlantic and Pacific drawn away from the Americas. The red beam motionless, fixed. And then the climax.

It began with the sudden vanishing of the light that held the moon; abruptly it was gone—without warning. A momentary hope for salvation in the hearts of man. A short pause, as though something were biding its time.

Then a sudden, colossal blow wracked earth from pole to pole; continents split; sea-bottoms raised; volcanoes were born—such was the final cataclysm that rocked the tortured earth. Cities falling—mountains rising—and mankind swept into unconsciousness.

There were a few of those who had fled to the highest pinnacles who retained their senses; to them was given the privilege of seeing the salvation of the earth. For salvation it was, in spite of its attendant destruction—a miracle.

Suddenly the beam of crimson light from Tycho had lengthened—and the world had been cast instantaneously back to its former position in space. A moment's pause—then abruptly it had begun to spin; it had returned to normalcy. Another moment, and the light that had wrought such havoc—vanished.

The menace was gone—and earth was saved!

Hours later, when the survivors regained their senses, a universal cry of praise arose to the sky. Men sobbed in incoherent joy at their miraculous rescue. The mad-

ness of fear was gone; and man was his sane self again.

And then, after the water receded from the land, and tranquillity returned to the face of the earth, the remnant of earth's millions crept wearily down from their mountain sanctuaries and began the work of wresting their former civilization from the chaos of destruction.

Rough, unfamiliar continents; oceans where no oceans had been; gigantic, smooth-crushed roads, circutures fifty-four miles wide, bleakly desolate, encircling the earth; shattered cities—all these greeted their eyes. A colossal task—but man attacked it with a purposeful vigor, seeking in physical and mental action for surcease of sorrow and of regret for lost loved ones, and for the civilization that had passed.

As they labored, men's thoughts turned continually toward the sky. Questions were in every mind. From whence had the first Light come? What was its purpose? What had taken it away? And finally—what had happened to the men who had gone to the moon? Scientists and the world could only conjecture; they did not know.

Then, two days after the vanishing of the pillar of light, all these questions were answered. A gleaming, metal projectile, the *Rocket*, dropped from the sky, and two men stepped forth. Three had gone, but only two returned.

And these two, to answer the many inquiries, told in its entirety the story of the Light from Infinity.

## CHAPTER II

### The Men in the Moon

AS the *Rocket* left her moorings and flashed into space with accelerating speed, her three human occupants felt themselves pressed into their air-cushioned hammocks with crushing force. For a moment a stifling wave of heat passed over them—gone almost instantly as they left the atmosphere and its friction behind. But the pressure of acceleration continued, increasing in intensity until the pioneers into space knew that they were rapidly reaching the limit of their endurance. Then abruptly the crushing weight lifted—the *Rocket* had reached its maximum velocity.

Slowly, painfully, John Kennard, the designer and builder of the *Rocket*, unbuckled the straps that held him to his hammock. His body felt as though he had just undergone a severe pummeling. A moment later, a sudden movement sent his six foot, one hundred eighty pound frame drifting through the air.

"What on earth is the idea, John?" Nevil Craig, the short, heavy-set mechanic of the crew, exclaimed as he released himself. "You—" he broke off abruptly as he, too, floated toward the *Rocket's* walls.

"Not 'on earth,' Nev," Kennard corrected. "You should have said 'What in space!' You know very well that our peculiar antics are the result of the lack of gravity. It was in anticipation of this that we had all the machinery and furnishings fastened to the floor, and had these railings placed along the walls."

Then he added in jocular tones, "Come on, Norcott, time to get up."

A few seconds later the third member of the trio, quiet, slow-moving David Norcott, astronomer, joined them.

Quickly they made their way to their pre-arranged posts, drawing themselves along the railing. Craig hung suspended beneath the thick, isol-glass window in the nose of the *Rocket*, peering up at the white disc of the moon, brighter now than it had ever been when viewed through the earth's atmosphere. Norcott's post was at the other end of the vehicle in one of the tubes that protruded from its sides, parallel with its walls. Thus he was placed beyond the stream of yellow sparks that the vehicle emitted; his view took in the dwindling sphere that was the earth. Kennard stood at the controls, anxiously watching the dials that registered their speed and course. He was prepared to change their direction at a moment's notice with a carefully directed rocket-charge. For Kennard was anxious in spite of his jocularly—the fate of the voyage depended upon him.

Suddenly an exclamation of amazed incredulity burst from the lips of Nevil Craig.

"Good gad, John, Dave, look at that!"

Together the two floated to the window in the prow, and stared at the astounding spectacle that had startled Craig. A great, red beam, all of two hundred miles in diameter, seemed to have leaped out into space from the upper portion of the moon. A solid pillar of crimson light, it lost itself in the blackness of space.

"What on earth," began Craig; then he paused abruptly as the incongruity of his habitual expression flashed upon him. "Ah—what can it be?"

Kennard and Norcott shook their heads. "Ask something easy," the former exclaimed.

Then they fell to discussing the amazing phenomenon, thoughts of their precarious position banished for the moment by the strangeness of what they saw. Many and fantastic were the theories with which they tried to explain it. In the midst of their discussion—which lasted only a few minutes—they were brought back to consciousness of their surroundings with an unpleasant abruptness.

A sudden, rending, thundering crash shook the *Rocket* with such violence that the three men were whirled through the air like so many leaves. There followed a series of grinding bumps against the side of the craft. The *Rocket* lurched viciously in the opposite direction; then slowly it staggered back to normalcy.

Kennard, who had grasped the railing at the *Rocket's* nose, saw a black, jagged mass of rock, fully as large as the sky-car, drawing rapidly away, heading in the same direction. He paled.

"We grazed a big meteorite!" he exclaimed. "Fortunate for us that it didn't strike us squarely. It was a narrow escape—we had better attend to the business of running this boat, instead of speculating on something that we can't possibly explain. Not that we can do a great deal to ward off danger, at that," he added.

A few moments later, after they had determined that no real damage had been done to the *Rocket*, their thoughts turned with one accord to the pillar of crimson light. Finally they decided to direct the *Rocket* toward the source of the beam to learn what they could about it.

The next three hours dragged by uneventfully, as Luna drew steadily closer. It presented an awe-inspiring spectacle at the end of that time, filling a large portion of the sky. The red beam, too, was assuming greater proportions, for they had gone fully half the distance.

The entire trip, at their approximate speed of ten miles per second, required less than seven hours.

Conversation lagged while the men contemplated the majesty of the Lunar disc and the enigma of the pillar of light, their minds busy with conjectures as to what wonders would be revealed to them on earth's satellite. Finally Kennard broke the silence.

"I think we had better put on the brakes," he said thoughtfully, "for when we start falling, we're going to travel! A discharge or two from the *Rocket's* nose will be our safest bet—for as I said, when we start falling, we'll fall fast."

At that moment, as though in direct corroboration, the *Rocket* leaped ahead like a frightened hare and flashed toward the moon with incredible speed.

A frown wrinkled Kennard's brow as he hastily released a rocket charge from the vehicle's prow. "I can't understand this," he muttered. "The moon shouldn't have started pulling yet, for we haven't reached the dividing line between the gravity of the two spheres."

Craig and Norcott left their posts and drew about the instruments. Anxiously the three watched the dial that registered their velocity. Their anxiety grew when they saw that instead of slowing up, they were accelerating! A second and third discharge were as fruitless as the first; their velocity continued to increase.

Twelve, fifteen, twenty miles per second, they hurtled through the void, falling headlong toward the rugged, Lunar surface. And as the glowing disc of desolation leaped up toward them, the beam of crimson drew proportionately closer. Something—the thought suggested itself to them—had the *Rocket* in its grip and was pulling it through space as a magnet draws iron filings.

With faces blanched and bodies tensed, they waited, staring fixedly down toward what seemed inevitable doom. They were helpless, impotent—they could only wait.

After watching for a few minutes, each century-long, Kennard drew himself by means of the rail over to the instrument board. A sudden excited exclamation escaped him.

"We're slowing down! Now's our chance!"

Quick as thought he released a serious of charges—but it availed him nothing! The *Rocket* sped on through space, apparently unaffected, slowing down at the same gradual rate it had had before Kennard's attempt to retard its progress.

"Since we can't do anything to stop the *Rocket*," Norcott suggested, "perhaps it would be a good idea to put on our air-tight space suits. If we crash as we are now, it'll mean almost certain death, for there's little chance of the *Rocket's* escaping injury. But if we're protected by our suits, we'll have something of a chance at least, for we won't be affected by the exhaustion of the air. It might be a precaution well taken."

Kennard and Craig were quick to see the value of Norcott's suggestion. In a few moments they had secured the suits from their place of storage, and began donning the clumsy, uncomfortable apparel which was to protect them from the cold or heat of interstellar space, and the possible loss of air. Electrically heated—or cooled, if occasion demanded—air-tight, equipped with a device for changing the carbon dioxide in the air to oxygen, the suits reduced their danger to a minimum.

At the precise instant when Norcott, the slowest at preparing, had finished arranging his spherical, trans-



parent head-covering, the *Rocket* came to an abrupt, crashing halt. The three were thrown against the wall of the vehicle with such force as to be momentarily stunned.

In a few seconds they recovered and leaped hastily to the windows.

Craig, at the base of the *Rocket*, saw a slightly convex expanse of crimson metal, against which the sky-car was anchored, seemingly at right angles to the curving, perpendicular plane, thus lying parallel with the moon's surface.

Kennard and Narcott, looking out through two of the *Rocket's* small side windows—the side now forming the floor—gasped in incredulity at the sight that met their eyes. Two huge figures, grotesquely clad in awkward, crimson armor, stood a short distance away, contemplating the *Rocket*. They were fully twenty feet tall, but with bodies strangely narrow and thin. Apparently they were human in form, though, for they possessed a head, a torso, two arms and two legs. More than that, the men in the sky-car could not see, due to the concealing armor. As they watched, one of the giants walked beyond their range of vision.

Suddenly the *Rocket* fell from its moorings, and dropped to the moon; the force that had held it had evidently been released. Protected as they were by the heavy, padded suits, the three men escaped injury in the crash.

Hastily Kennard leaped to his feet and sprang to the controls.

"We can make it now!" he cried—though no one heard him, the sound being held in by his suit. Then he closed a switch.

A thunderous roaring at the base of the *Rocket*—the sudden, crushing weight of acceleration—and they were speeding away from the moon into space again.

"Where on earth did they come from?" Nevil Craig muttered to himself, referring to the giants—then he was hurled violently through the air, landing with a crash against the wall of the *Rocket's* prow. At the same moment, Kennard and Narcott, too, were spun through the sky-car. It happened so abruptly that none of the three knew what it was all about. And their senses left them so suddenly that they knew nothing of what happened afterwards.

The same force that had captured the *Rocket* in the first place, had cut short their attempted escape. The sky-car had stopped, but Kennard, Craig and Narcott had continued moving. During the return to the moon, they lay silent and unmoving in the base of the huge projectile.

KENNARD was the first to recover consciousness. His robust, muscular body was less affected by the crash than the weaker frames of the others. His first conscious impression was the knowledge of a blinding light that seemed to pierce his eyelids. He opened his eyes—and closed them immediately, blinded by a dagger of crimson radiance. By degrees he grew accustomed to the intense light; then he stared curiously around.

He was lying flat on a hard, metal surface. A hundred feet above him was the crimson metal ceiling of the chamber. He followed it with his eyes. Seventy-five feet at least, it stretched from wall to wall, a flat disc of gleaming crimson. The walls, slanting inward from the ceiling to the fifty-foot, circular floor, also were

crimson, smooth and unbroken, having neither doors nor windows. Along the wall at one point was a complexity of colossal, crimson machinery—huge cones and notched discs—a gigantic flywheel—mighty levers—a bewildering mechanism.

Crimson machinery, crimson chamber, brilliant crimson light—Kennard closed his eyes tightly to shut out the maddening sight. Dully he wondered at the spectacle, his mind still slightly befogged.

Then he heard a sound behind him, a low rumble of voices in conversation that penetrated his heavy, isolation head covering. He turned his head and opened his eyes. A vision of two red, twenty-foot giants—the sudden, complete regaining of his faculties—and Kennard sprang to his feet. A sharp pang of pain shot through his body; he felt bruised and sore. Landing about twelve feet away, he faced the tall figures, his pain forgotten, body rigid, and every sense alert.

The red beings glanced in his direction for an instant; then they continued their conversation. As they stood there, motionless, Kennard studied them.

They had removed the crimson armor that they had worn when Kennard first saw them, and were now clad in a single garment of red chain mail, like close-fitting, metal tights. Their bare skin, a brilliant crimson that in nowise resembled the coppery-red of the American Indian, had a strangely leathery appearance, as wrinkled and fissured as old parchment. This hung from their towering bodies in loose folds, as though there were not enough flesh to hold it from their bones. It was completely hairless, even the head being devoid of covering.

What impressed Kennard most was the fact of their being so preposterously thin. Their breadth, about a foot and a half at the shoulder, was grotesquely out of proportion to their extreme tallness. They appeared to have grown far too rapidly in height, without a corresponding increase in width, thus reaching this disproportionate state. The thought came to Kennard that they had come into being on some sphere where an extremely slight gravity had permitted their astounding elongation.

Their heads were long and narrow, roughly conical in shape, about the height of a half-grown boy. Their chests, on the contrary, were high and bulbous, suggesting the bloated body of a spider. Their waists and limbs were incredibly thin and fragile—taken as a whole, they resembled nothing more than disproportionate human greynounds!

After a brief scrutiny of the men's bodies—for they were men in spite of their fantastic structure—Kennard turned his attention to the face of one of them. He shuddered involuntarily. That countenance was cruel, hard—and emotionless.

The upper three-quarters was forehead, a high, narrow forehead that denoted great intelligence—warped probably. The eyes, great orbs that protruded from the sides of the head, with thin, membranous coverings like the eyelids of a bird, were terrifying, devoid as they were of a coloring iris—an expanse of pink eyeball, broken by a large, jet-black pupil. An ugly, moist, perpendicular gash below the eyes evidently served as a nose, for it quite certainly wasn't a mouth—that was the toothless, quivering orifice in the base of the chinless face. And finally, the ears, insignificant blobs of flesh that dangled lifelessly, were a fit completion to that monstrous cranium.

Kennard's eyes were drawn from the Red-men—as he thought of them—by a motion on the floor a few feet away. Craig and Norcott had recovered their senses and were crawling to their feet. They stared around the stupendous, crimson chamber in wide-eyed amazement. Norcott's lips moved, but Kennard could hear no sound. Then their eyes fell upon the Red-men, and they gazed in unbelieving wonder.

Suddenly Craig fumbled with his head-gear, and raised it from his head. Since he suffered no ill effects, the other two—who had been startled by his seeming rashness—followed his example.

In another moment they were engaged in excited conversation. The amazing, crimson room, the grotesque Red-men, the future of the three—all were topics of discussion. When practically everything had been said that was worth saying, Norcott summed it up in his quiet, concise way.

"These beings probably came to the moon in this vehicle, traveling along the pillar of light, for I certainly don't believe that they are natives of the moon. With some great force, perhaps an unknown form of magnetism, they captured the *Rocket*, which, may I remind you, is constructed in part of that super-magnetic alloy, parminvar. While we were unconscious, they made an opening into the sky-car, reached in, and pulled us out. Then they carried us into their machine, and deposited us here on the floor.

"I think they brought us here to study us, for to them we're too insignificant to bother with for any other reason. What the future holds, we'll learn in due course."

With that their discussion ended, further talk being impossible due to the intervention of the Red-men. With a single, great stride they reached the three. In another moment Kennard and Norcott dangled high above the floor, held close to fearful, repellent eyes. For a moment they hung there; then they were lowered to the side of Craig. An instant later, he, too, was whisked into the air to receive scrutiny of a protruding eye; then he was returned to his feet.

Something of warning, of reprimand, had been in those eyes—of admonition to good behavior—as though a warning finger had been shaken at refractory children!

TIME passed rapidly for the three men from earth. The Red-men didn't object to their wandering about in the huge vehicle; there was so much to see and study that their minds were constantly occupied.

Their greatest interest lay in the observatory at the top of the vehicle, or in the great laboratory and work-room in its base. These were reached by a long climb around a great, winding stairway in the outer shell of the vehicle, the entrance to which lay behind the machinery in the huge central chamber.

In the observatory they spent hours at an amazing device that bore no resemblance to a telescope, except for the fact that it had lenses. The image of the earth on a great, glowing screen in the center of the device, appeared to be less than five miles away. They could see cities, the larger streams and lakes, the mountains—and all in detail. Except for the fact that everything was tinged with scarlet, the observation was all that could be desired. Their one regret lay in their inability to focus the device upon any other heavenly body. It pointed fixedly toward the earth.

The workroom, too, was a source of never-ending wonder. Here the tall Red-men spent most of their time, working at the construction of two amazingly intricate machines, using complex tools that had no counterparts on earth. It was a pleasure for the terrestrial artisans to watch the labor of greater scientists.

At regular intervals the Red-men gave the three a quantity of a queer, crimson paste that answered for both food and water. It was almost tasteless, but it was very satisfying, nevertheless. That the times for eating were more infrequent than those to which they had been accustomed, was recompensed, to some extent, by the greater quantity of the food.

Except for two things, their stay in the great, metal vehicle was pleasant. In the first place, they were subjected to an occasional close scrutiny on the part of the Red-men; secondly, the crimson light of the place was maddening in its ceaseless, unchanging brilliance. But gradually they became accustomed to this latter annoyance.

During the time they were in the vehicle, they sought frequently for some means of escape; but their efforts were in vain. They were unable to find even an exit. Gradually, the three became reconciled to their position, consigning their hopes to the future.

Then finally, after they seemed to have spent many weeks in the crimson structure, hope sprang into being again like a newly lighted flame. The complex machines in the work-room were complete at last. With the final detail attended to, the grotesque Red-men began donning their clumsy, metal armor. In excited anticipation Kennard, Craig and Norcott hastily put on the space suits they had discarded so long before. Escape, they hoped, was near.

### CHAPTER III

#### The Beam from Tycho

KENNARD, Craig and Norcott watched intently every movement of the armored giants as they busied themselves with the colossal, crimson machinery in the central chamber. There seemed little to do—merely the closing of a huge switch and the slow turning of a great, notched disc.

Immediately the machinery sprang into action. The great flywheel began turning, speeding up with each revolution; cones began to whirl madly—the entire intricate maze coming to life. The crimson air about the machine crackled ominously; pinpoint sparks of fire flashed through the red chamber. And above all could be heard a shrill, unearthly whine, rising higher and higher, piercing the ear-drums. In a few moments this became inaudible, having mounted above the range of human hearing.

Then the earth-men became aware of a strange trembling in the floor beneath their feet. An infinitely rapid vibrating—as though the electrons in the red metal were whirling with an incalculable, unwonted rapidity. Minutes passed by while this vibration increased in intensity; then suddenly the floor, ceiling, walls and machinery were transparent! Wraithlike, they could still be seen, but beyond them the landscape of the moon stretched away on every side, strange and unearthly, seen through a crimson mist. Kennard's eyes searched for the *Rocket*, but it was not in sight.

Needless to say, the three men watched the strange behavior of the machine in amazed fascination. Forgotten were their thoughts of escape. And then a moment later, came the culmination! The moon's surface sank rapidly from beneath the huge vehicle, and began flowing away—the great machine in horizontal motion.

Rapidly they sped through the crimson light, passing over miles of harsh, dead desolation. Crag rose upon crag, and precipice upon precipice, mingled with craters and yawning pits, towering pinnacles of rock, and piles of volcanic debris. As far as eye could reach through the crimson radiance, the landscape was the realization of a fearful dream of desolation and lifelessness—utter and complete death! A scene of wild, forbidding grandeur. It was a queer sensation, this moving high above a dead world in an almost invisible vehicle, as though they were flying without support.

They had gone but a comparatively short distance when, without warning, the red radiance ended, and they plunged into an awful, pitchy blackness. High above shone the glowing stars, at its third quarter, and brilliant, unwinking stars studded the ebony dome, but these were powerless to mitigate the impenetrable gloom. There was still crimson light in the vehicle, though, probably emanating, in some inexplicable way, from the transparent walls.

With the plunge into the blackness, a sudden wave of incredible cold struck the car, immediately penetrating the space suits. Hastily the men switched on their heaters.

A sudden thought came to Kennard, and he looked back. The vehicle was speeding away from a colossal pillar of crimson light that presented a curving surface miles upon miles in length. In a flash the scientist understood two things. They had been in the center of the pillar; and the Red-men had donned their armor to guard against the intense cold that they knew would follow their departure from the pillar's confines.

Immediately after the vehicle's entrance into the darkness, the Red-men had turned their attention to the whirling machinery. They worked with the intricate device for a moment; then suddenly a bright beam of crimson leaped from the apparatus, pierced the transparent walls, and spread fan-wise ahead of the vehicle, lighting up the surface of the moon below them. Then the five of them, grotesquely armored Red-men, and clumsily clad earth men, devoted their complete attention to the desolate cosmorama.

On and on over Luna's scarred face they flashed, moving with incredible speed. At the pace they had attained, Kennard thought, they'd circle the globe in a short time. Then he noticed that they were slowing down. Finally, they came to rest, suspended high above the surface.

Far below, casting back the rays of the crimson searchlight, lay a great crater amphitheatre. From every side of it diverged wide, radial streaks which stood out in sharp contrast to their darker surroundings. Some of these rays reached over miles of the Lunar surface, faintly outlined by the minute quantity of light that was shed by the distant earth. The great length of those radiating, lava-filled fissures marked this crater unmistakably as Tycho.

As they descended into the heart of the crater, the eyes of the three scientists sought to take in every detail of the magnificent spectacle. The jagged ridges of

the rampart, in some places reaching 16,000 feet above the surface of the plateau; the concentric, terrace-like formation that led to the crater's center; the great, central cone, 5,000 feet high—they studied these.

The vehicle landed softly in the heart of the crater at the base of the huge cone. All about stretched the silver-gray surface of volcanic glass. At some time in the remote past when Tycho was the scene of a vast disruptive cataclysm which rent the solid crust of the moon into radiating fissures, the crater had been a veritable pool of molten sandstone.

While Kennard, Craig and Norcott were inspecting Tycho, the Red-men were busy with what was evidently their reason for coming to the crater. First they bent their efforts toward the huge machine, manipulating a second great lever. In a moment they stepped back and watched the wall.

Something was happening to the wraithlike side of the vehicle opposite the spot through which the crimson searchlight shone. Somehow it gave the impression of a great swirling and vibrating, as though it were shaking itself into nothingness. And that apparently was what happened, for suddenly a great circular opening appeared in the wall.

Immediately the Red-men made their way to the workroom in the base of the vehicle. The three watched them through the transparent floor as they grasped one of the intricate machines on which they had labored so long, and carried it up the winding stairway to the opening. After pausing a moment they leaped to the floor of the crater—a distance of about forty feet—bearing their device between them.

By common consent the three watchers followed, the forty foot jump offering no difficulty whatsoever, due to the moon's lesser gravity. After recovering their footing—they had lost their balance in landing—they faced the vehicle with one accord, curious to see the outside of the prison that had held them.

Approximately one hundred and seventy feet the vehicle towered above them, resembling nothing more than a huge, top-heavy hour glass. It was wide at the top, gradually tapering toward a point some distance below the center, then spreading out abruptly. Its resemblance to an hour glass was accentuated by its wraithlike transparency. For a few seconds they eyed the vehicle; then they turned toward the Red-men.

They were a considerable distance away by this time, moving up the slope of Tycho's cone with great, Brobdignagian strides. Hastily the three men followed, moving more rapidly than the giants, in prodigious leaps.

On the summit of the cone they paused. The Red-men were busily engaged in placing their apparatus in position on the flattened apex. In a few moments they evidently had it adjusted to their satisfaction, with its eleven huge tubes pointing toward so many different portions of the crater's floor; then they made their way down to the vehicle again.

With an air suggestive of condescension, they placed the men in the car, and vaulted in themselves. In a moment the great flying machine arose from Tycho's floor and darted toward the ramparts that made up its edge. They paused on a broken segment of the crater's rim.

The second machine, smaller than the first, was brought from the workroom then, and placed on the rugged ridge. Kennard, Craig and Norcott watched them from the door of the vehicle.

When they had the device arranged satisfactorily, they sprang hastily into the flying machine and sent it high above the moon, some distance to the left of the crater. And there they hovered, watching Tycho intently.

Suddenly there was a vague suggestion of crimson light on the red-metal machine on the rampart. This grew rapidly to a cloud of brilliant fire that completely covered the device that had created it. Then there was a flash on the summit of the central cone, spreading like wild-fire, in a few moments covering the entire floor of Tycho. And then, a split second later, it leaped out into space, a fifty-four mile wide pillar of crimson light that sprang unerringly across space to the earth—the crater a reflector to cast the light through the void!

"SOMETHING must be done immediately," Kennard exclaimed in a determined voice. "We can't let that terrible destruction continue!"

Craig and Norcott nodded, a worried frown on the pale, earnest face of each. They had just come from the observatory in the vehicle's top—the Red-men were still there—where they had been watching the earth through the powerful telescope of the giants. They had seen the terrible destruction that had followed the advent of the red beam on the Terrestrial sphere. And they realized now with overwhelming force that they alone stood between the inhuman Red-men and the possible destruction of earth.

"If we could only get at the machine on the rampart," Craig said thoughtfully. "That's the key to it all. If we could destroy that, we'd cut off the ray."

"Yes," agreed Norcott, "but we can't get at it. With the walls restored to their normal, opaque selves, and the door—if we can call it that—closed by some unexplainable method, we're helpless. We're parked only a short distance from the machine, but we might just as well be miles away."

"Well, let's get rid of the bean-poles upstairs, first," Craig suggested. "Then we can work unmolested. We can rush them, and overcome them by force of numbers."

"Oh, yes, that'll be easy," snorted Kennard. "They're only about three times taller than we are. Fat chance we'd have!"

There was a period of silence then, while the three wracked their brains for an idea. Norcott seemed to be struggling with himself. Finally his jaw set at a tenacious angle, and he began speaking in his low, measured voice.

"I have a plan that I'm sure will succeed," he said, "if we can get past the first difficulty. It will be necessary for us to get the Red-men outside this machine. With that done, the rest will be comparatively easy."

"Here's the plan: After all of us are outside, I'll remain close to the Red-men, and make myself as conspicuous as possible. In some way we'll have to keep their attention away from the car. You two, at the first opportunity, will start toward it, get inside, and pull down that big lever. You've watched the Red-men often enough to know something about the running of the machine."

"When you start moving away, slowly so that they can follow, I'll smash the apparatus on the rampart to bits. And finally," he concluded vehemently, "if you're able to do so, you can double back and smash these redskinned brutes with their own vehicle."

"Absolutely no!" exploded Kennard. "It's a good

idea, but we can't use it, you'd be taking all the risk!"

"Well, why shouldn't I? You and Craig are more necessary to the running of the *Rocket* than I am, anyway. You, yourself, actually run it; Craig is needed to make necessary repairs—whereas, I'm only an astronomer. If there's any risk to take, I'll take it!"

After a rather heated discussion, they finally agreed to Norcott's plan, neither Kennard nor Craig being able to suggest a better one. But none of the three could think of a way to get the Red-men out of the vehicle.

A few hours after the discussion, the beings solved the problem for them. Attired in their crimson armor, they descended from the observatory, and immediately opened the strange door. Hastily Kennard, Craig and Norcott put into place their spherical helmets; they hadn't removed their space-suits.

As they followed the giant figures toward Tycho's walls, the three men felt nervous and apprehensive; nor was it any wonder, for the fate of the world would possibly be decided by the result of their venture, not to consider the danger to themselves. Norcott was well up in the lead, a foot or two ahead of the Red-men. Craig and Kennard lagged behind. As the three leaders drew closer to the crater, they fell farther and farther back.

And then when the crimson beings leaned over the device that controlled the beam, the men turned, and with two gigantic, sixty foot leaps, reached the vehicle. It was a forty foot leap upward to the door of the car, but they cleared it, catching with their hands, and drawing themselves inside.

As they turned toward the controls, Kennard caught a glimpse of a towering, red-clad figure hurling himself over the ground at express-plane speed. With a wild leap the scientist caught a lever and bore down with all his weight. All too slowly it descended toward the floor.

The whirling machine responded instantly—but with amazing results. The vehicle lurched wildly; there was a sickening thud; then he and Craig were thrown to the floor. They regained their feet almost instantly, and turned as one man toward the portion of the wall that had held the great, circular opening. It was not there! Where it had been was now an unbroken expanse of transparent, crimson metal.

That single lever had closed the door, rendered the walls invisible, and started the machine whirling somewhere at a break-neck speed! Far away in the rear, the beam from Tycho was already vanishing, being lost to sight because of the curvature of the moon's surface.

"Quick, Craig!" Kennard cried, "give me a hand!"

Together they grasped a second lever and strove to undo what they had done. But it was to no avail—their combined weight had no effect upon it. Meanwhile, they continued on and on, flashing over the moon like a shot.

"Damn it, Nev!" Kennard almost sobbed, "I made a mess of it all. . . . Poor Dave, left with those brutes! . . . But I had to do something, for the Red-men were almost upon us. . . . Poor Dave!"

"Don't take it to heart, John," Craig counseled. "It wasn't your fault." He rested his hand on his friend's shoulder.

Since starting so precipitously, the huge vehicle had been hurtling through darkness; suddenly they entered a vast expanse of brilliant, crimson light. Below them lay a landscape that was strangely familiar.



"What on earth!" exclaimed Craig. "Why, John, we've returned to the original pillar of light!" Kennard nodded morosely, still frowning in self-condemnation.

On through the crimson glow they sped, watching the landscape flash by beneath them. Then suddenly the towering mountains, the close-clustered craters, and dead sea-bottoms vanished, and they felt that they were rising rapidly. With undiminished speed they were moving up that pillar of light, in a vehicle they could not control, flashing into—infinity!

## CHAPTER IV

### Into Infinity

**F**ASTER grew the pace of the vehicle—up—they hurtled—scores of miles—hundreds—A crushing weight bore down upon Kennard and Craig, chaining them motionless to the floor. In a moment, however, the intolerable burden lifted, and all sense of motion vanished.

Then they became aware of a faint tingling, an almost imperceptible throbbing of the vehicle—and a hum as of a faint echo of a distant tempest. It was not the vibration that had preceded their journey across the moon; the floor of the vehicle was motionless, solid. Not vibration, but a tingling that seemed to pervade every atom of the red-metal craft.

Suddenly the men realized that there was a faint tingling within themselves! A tiny, barely noticeable whirling—yet it brought a sense of nausea. Kennard reeled dizzily; swayed; Craig drew him down to a sitting posture on the floor.

Slowly the nausea passed; cobwebs of bewilderment swept from their brains. Together they arose; aware now of a strange lightness, a sense of ethereal freedom—as though age-old fetters had been torn from them. In a moment this too passed, and they were back to normalcy.

They removed their spherical helmets in order that they might converse.

"Whew!" ejaculated Craig. "Some jag! If we could bottle that stuff, we'd make a fortune in twenty minutes in any city in the U. S. A." He laughed rather wildly.

There was no answering light of mirth in Kennard's eyes. His thoughts were of a lone astronomer left to face the revenge of two grotesque, inhuman creatures; of a world in the grip of a crushing beam of radiance that, at that very moment, was stamping out the lives of men, women, and children. Under his troubled gaze, Craig's jocularity vanished.

"Nev," Kennard cried in sudden desperation, "we've got to get back! We can't leave Norcott like this! And the beam from Tycho—unless it's taken away in a very short time, it'll crush out the life of humanity! We must—must get back!"

Craig opened his mouth to reply, but closed it without speaking. In silence he joined Kennard in his efforts to check their flight. The latter had attacked the huge machine of the Red-men in a frenzy of effort, striving by brute force to make the machinery yield to his will. But it resisted their efforts stubbornly, the great levers seemingly locked in immobile rigidity.

He was about to desist, despairing of ever controlling the huge vehicle, when it occurred to him to try to

manipulate the great, notched discs that played so prominent a part in the machine's structure. Choosing one at random, he grasped it, and strove to move it with all his strength.

Suddenly it yielded—and Kennard and Craig were thrown back violently by a whirling, crimson vortex of force that leaped from a huge, crimson sphere in the heart of the machine! Hurling back by a force that, paradoxically, seemed to attract them as it repelled.

For a moment they were aware of a rapid dwindling of the machine before them; the ceiling of the great chamber rushing down to meet them; the walls moving inward—then conscious thought left them.

A roaring chaos within their minds—their sense reeling, staggering—and they crashed to the floor, unconscious.

It seemed only a moment to Kennard that he was senseless. He lay on the floor, blinking up at a conical beam of light that converged in a point a few feet above his head. For a moment he stared at it dazedly; then in a flash he remembered what had happened. The turning of the notched disc, the stabbing cone of crimson light, his strange sensations—and the lapse into unconsciousness.

Slowly, carefully avoiding contact with the ray, he crawled to the machine, now strangely smaller than it had been, reached up toward the offending disc, and turned it back to its former position. The crimson beam vanished.

As Kennard rose to his feet, he gasped in mystification. The machine was larger, or—he suddenly realized the truth—he, himself was larger! Craig, lying a short distance away, was fully twenty-two feet tall, far more of a giant than the Red-men, for he was proportionately broad. And he, Kennard, was even taller. Somehow that ray had caused their bodies to increase in size to a tremendous degree. Fortunately, in falling they had dropped out of its range; if they hadn't—Kennard shuddered—they would probably have expanded until they filled the vehicle, pushing against the sides; bursting it—

At that moment Craig sat up and blinked. An expression of incredulous astonishment overspread his face. In answer to his amazed questioning, Kennard told what had evidently occurred.

When they had adjusted themselves to some extent to their unusual state, an adjustment that required a complete alteration of their viewpoint, Craig offered a suggestion.

"Say, John," he said thoughtfully, "perhaps we'll have better success in attempting to control the machinery, now that it has shrunk to a sensible size—or rather, since we've expanded. We can try, at any rate."

Kennard nodded. "Yes," he said slowly, "it probably would make a difference, but I don't think we'll try it anyway. For one thing, we don't know what forces may be locked up in that maze of metal; besides, we're headed for the world of the Red-men. I've been thinking that, even though we had been successful in snuffing out the beam in Tycho, the menace wouldn't be removed anyway. This pillar of light that we're in is evidently a sort of tunnel that the Red-men use to travel through; as long as it's in existence, the earth will be in danger. Now that we're as large, in fact larger, than the Red-men, and are headed toward their

world, we may be able to do something that will make the earth safe from future invasions.

"I don't really believe we could stop the vehicle anyway; I've an idea that the lever I pulled down back there on the moon was an emergency device that automatically sent the vehicle back to the crimson pillar, prepared it for its trip back to the world it came from, and started it on its return journey. I may be wrong, but I believe that the device automatically locked itself against interference."

It was some minutes after Kennard had ceased speaking that Craig called to his attention a faint, luminous, white patch beyond the wall of the vehicle. Together they peered through the transparent metal. The blackness of space seemed but a few feet away; conditions had evidently changed at some time since their start up the crimson beam. Either the pillar of light had contracted, or else the vehicle had expanded to an enormous size. Kennard, thinking of their own phenomenal growth, was inclined to favor the latter idea.

The patch of light spread out rapidly, and as it spread it resolved itself into a galaxy of stars! Giant suns, white, blue, yellow, red—gigantic, fiery orbs whirling through the void. They flashed past on every side, close-clustered spheres of flame. Perilously close to the vehicle, some seemed to be—perilously close—Kennard and Craig fell back as an angry red star flashed toward them.

There was an insignificant explosion, intensely bright, on the outer surface of the crimson pillar—and they were past that point, speeding on through the illimitable void. A flash—and a great sun snuffed out! A monstrous world of incandescent gas—a collision a few feet from the vehicle—and a gigantic star destroyed! Incredible, bewildered, amazed, Kennard and Craig stared wide-eyed into space.

"What on earth!" gasped Craig hoarsely. Kennard motioned for silence.

Another patch of light lay ahead. In a moment they plunged past. A universe of stars—great suns blazing alone, giant binaries turning about a common center of gravity, nebulae swirling like silver mist—yet they were small, were but little, glowing balls in the blackness of space a few feet away! A moment, and they were lost in the distance.

Another cloudy haze of light, smaller still, whirled past. Its suns were infinitely minute—pin-points of fire—enduring, whirling sparks! And beyond lay a vast expanse of unbroken blackness.

Craig turned to his companion, visibly shaken by the tremendous, celestial panorama of dwindling stars that they had passed. "John, what—what can it mean?" He gestured toward the void. "Stars like baseballs, marbles, pin-points—what's happening?"

Kennard was less perturbed than Craig, and far more thoughtful. He replied in a slow, musing voice.

"An explanation presents itself, that, in spite of its apparent difficulty of comprehension, seems to be the logical solution. I've read of a theory of the construction of the whole material universe that seems to hold the answer. It involves what might be called a"—he groped for the word—"a succession of realms of existence. A theory of infra- and supra-worlds, unending.

"Our own realm with its myriad suns, galaxies, island universes—one phase of existence. The atoms that make up everything in our realm, with their protons and

planetary electrons—another plane. The inconceivable minute bodies that form the electrons, still another realm. And so on endlessly, down into the infinitesimal.

"Then, according to the theory, there are realms of unfathomable largeness. Our universe as a whole, forming the protons and electrons, and atoms, of a super universe. And that, in turn, a component part of a proportionately greater realm—on and on into infinity in size.

"A mind-staggering conception—unending space both larger and smaller than the space we know. Yet is it so very preposterous, or even unbelievable? We know very little beyond our own small phase of existence; who can tell what future knowledge will reveal?

"I'm inclined to believe that that theory is correct, and that we're rushing through space, constantly increasing in size, headed for a supra-world—the home of the Red-men!"

For a moment or two Kennard was silent then, lost in thought. Craig, too, said nothing; his mind was trying to grasp the immensity of the amazing theory that Kennard had advanced. A moment or two, then the latter spoke again.

"There's only one thing that puzzles me, and that is the factor of time. According to the theory that I mentioned, space and time in the microcosm are reduced in the same proportion. For example, as one scientist has computed it, a thousand million years on an electron would be equivalent to a millionth of one terrestrial second. Obviously, then, in the supra-realm the time condition would be the reverse; Earth could be destroyed countless times in a fleeting, supra-world second.

"If the theory I suggested is true, there is but one possible explanation. In some inexplicable way, the Red-men have conquered the secret of time as well as size. This must be so, because if it isn't, how can we account for the pillar of light pointing fixedly toward the moon? Still—but what does it matter, anyway? The theory is so involved and complex, that I think we had better drop it entirely."

"Sure," Craig burst out excitedly. "Sure—we'll forget the theory! But think, if your ideas are correct, and they certainly sound plausible, we might be able to look at the supra-world through the telescope in the top of the vehicle! We couldn't point it away from the earth when we were our normal stature, but now we may be able to focus it in any direction we desire."

"Good idea, Nev. Let's go!"

Quickly they circled the spiral stairway, reaching the observatory in a few moments. True to Craig's prediction, the apparatus yielded to their superior strength; they had little difficulty in pointing it directly above their heads, toward the source of the light.

Eagerly they focused the instrument, yet withal, carefully, even gingerly, lest their unpracticed fingers injure the intricate mechanism. Minutes passed by while they experimented—then slowly a clear-cut vision appeared on the screen in the center of the device.

At first, a white glow in a sea of crimson. The glow taking form—resolving itself into a gigantic, transparent disc, smooth and radiant. Beyond it towered a formless red shape, huge, gigantic. Sight of the supra-world!

Slowly, as the minutes passed by, and the vehicle sped on up the crimson pillar, the two men came to a reali-

zation of what they were gazing upon. The glowing, transparent disc was the lower, smaller lens of a microscope; the figure looming above it, a Red-man peering into the infinitely minute!

Suddenly the wonder of it all dawned upon Kennard—its vastness—its minuteness! Earth, myriads of light-years away—yet only an inch from the microscope! The pillar of light incalculably long, a colossal, funnel-shaped beam from infinity, converging upon the moon—yet only a fraction of an inch in length, and microscopically fine! A matter of viewpoint, that was all.

Rapidly the vehicle grew beneath the microscope. With their expanding visual viewpoint—sight of the Red-men and the room beyond—this velocity seemed to Kennard and Craig to be almost indiscernible. Yet it was only a few moments until the red-metal vehicle floated over a smooth, glass-like surface, in the center of which lay a huge boulder. As they continued growing, they realized that the plain was a glass slide, and that the boulder was a fine grain of sand! Myriads of planets, suns, galaxies, universes—all in a particle of dust!

A moment later the vehicle floated free from the microscope and settled upon the crimson floor. It continued growing until it reached its normal, proportionate size; then the great, circular opening appeared in the side of the vehicle; and automatically the mass of machinery in the central chamber slowed down—and was still.

The flight into infinity was ended.

## CHAPTER V

### The Supra-World

**S**TANDING motionless on the edge of the portal in the wall of the vehicle, Kennard and Craig gazed intently around them, inspecting their surroundings with curious eyes. They seemed to be in a huge laboratory, a great vaulted, cylindrical room, with floor, walls and ceiling of crimson metal. Long, metal tables holding a profusion of strange instruments stood in orderly rows that filled half of the chamber. At regular, though infrequent intervals there were tall, very narrow, paneless apertures in the walls that evidently served as doors and windows.

In the very center stood a table; on it lay the complex mass of tubes, lights and lenses that were the microscope through which the Red-man had peered into the infinitesimal. And beside the microscope crouched the Red-man.

Kennard and Craig stared at him in wonder. He seemed amazingly small, no more than five feet tall, about a foot shorter than themselves. For a moment they pondered; then they realized that they had undergone another change of perspective and viewpoint. Somehow their visual senses refused to credit their inexplicable growth, with the result that they viewed everything with their increased size as a normal standard. It was by that standard that they judged everything they saw while in the Supra-world.

As they studied the Red-man, they realized more forcefully than ever before how grotesquely disproportionate these Supra-world beings were. So puny and fragile was this creature that the men from earth felt that they could crush him with their bare hands. At the chest and shoulders, the widest portion of his body,

he appeared to be only about four inches in width.

Incredible creature! Long, thin head, bulbous chest, narrow waist and hips, unbelievably thin limbs—a human caricature of a Daddy-long-legs! A human spider.

A moment they gazed at the being; then Kennard sprang from the forty-foot height of the portal—it seemed only ten feet now—with Craig at his heels. They floated down lightly, landing without a jar about twenty feet away from the Red-man. Kennard stepped forward, a light spring that carried him a surprising distance. The Red-man shrank back, his skeleton fingers creeping beneath his single, crimson, chain mail garment.

Kennard moved a few feet closer—and the Red-man's hand emerged, bearing a small, crimson cylinder. A high-pitched, chattering stream of jargon flowed from the circular orifice that was his mouth, and his protruding eyes blinked rapidly.

Kennard hesitated, then stepped forward again—and stopped short in mid-stride. A beam of blood-red radiance had leaped from the Red-man's cylinder, and had bathed him in its alien light. Kenneth shuddered, then crumpled to the floor, paralyzed.

With a sharp cry of anger Craig leaped toward the diminutive, Supra-world being. In midair the stabbing beam found him; he too fell in rigid paralysis.

For a second the Red-man looked down upon them, then turned quickly away. They heard his bare feet padding rapidly across the floor for a moment—then he was gone. He had evidently made his way through one of the narrow doorways.

As Kennard lay there, striving with all his will to move, to speak, his mind was filled with gloomy thoughts. Their entry into the Supra-world was anything but satisfactory. If this was an example of how they were going to remove the pillar of light, the moon and earth were a long way from freedom. Other thoughts came too, thoughts of Norcott, the theory of the infinitesimal and of largeness unfathomable, intermingled with conjectures about the Supra-world.

In the midst of his mental soliloquy, cutting it short, he heard the padding of numerous approaching feet. A second later there came within the range of his and Craig's vision eleven Red-men. One, they recognized as the being whose ray had paralyzed them.

The eleven beings gathered around the recumbent figures, and began discussing them in their excited, high-pitched, chattering voices, examining with amazement their hair, the texture of their skin, others jotting down hurried notes. One expression seemed common to all—without exception they eyed Kennard and Craig with awe, marveling, probably, at their, to them, enormous breadth.

The being who had paralyzed them drew forth his cylinder after a while, and called it to the attention of the oldest member of the group, apparently the leader, and gestured at the same time toward the motionless men. As they discussed them, Kennard began to feel a tide of strength surging through his body. The chains of paralysis were gradually breaking.

Finally the older Red-man reached beneath his garment and drew therefrom a second cylinder. He pointed it suggestively toward Kennard and Craig.

As he did so, Kennard, with a tremendous effort of will, broke the invisible bonds and sprang high into the air. His clenched fist flashed out like a flail and tossed

the broken body of the older Red-man to the far side of the room. He landed with a sickening thud, and lay still.

Kennard saw a fleeting vision of the scene of death and destruction on earth that they had viewed while on the moon, and it filled him with cold fury. His arms swung out again and again, each blow sending his fist crashing through a fragile, crimson body, as though it had been an eggshell. In a few moments he alone was left standing.

He circled the laboratory with his eyes, and shuddered. Fragile, brittle bodies strewn about, broken, crushed; the crimson floor stained a deeper red. Shaking his head in revulsion, he turned toward Craig who was just crawling to his feet.

"Had to do it, Nev; it'll pay for a few of those lives that the beam from Tycho crushed out. I got them all, didn't I? None escaped to tell of our arrival, did they?"

Craig nodded regretfully. "One got away. It was the creature who paralyzed us. When you struck the old boy, he leaped headlong for a doorway, and escaped."

"That's too bad! We'll have to be on our guard constantly, then, for he's bound to tell of our arrival, and what I did. And if that paralyzing ray is a sample of the tricks they have up their sleeves, we won't be having a picnic!"

As Kennard paused, Craig asked a question. "Don't you think, John, it'd be a good idea for us to plan as closely as possible just what we intend doing?"

"Yes, it would—if we could. But there's so much of the unknown involved, that I'm afraid it's practically impossible. We'll do well, though, to keep our chief objective in mind, namely, to get rid of the ray, thus preventing any other invasions from the Supra-world, and at the same time we'll try to get back to the moon in time to help Norcott, if it's possible to do so.

"Another thing we must remember is to see that one of us is always here to guard the microscope and red beam, for if the light is cut off, it'll be an utter impossibility for us to get back. There's not one chance in a million that the beam could be re-directed toward the moon.

"But let's examine the microscope and source of the light, and see what we have to deal with."

In a moment they bent over the bewildering device. Nothing could be seen through the eyepiece save a long tube of crimson radiance that vanished far away in a pinpoint of light. That light had its source in an almost microscopically minute bit of apparatus that was affixed to the front of the instrument, close to the nether lens. Kennard stooped to examine this more closely; then suddenly he straightened up.

There was a sound of commotion outside—the steady drone of high-pitched, angry voices—jostling bodies—pattering feet. Hastily Kennard and Craig sprang to a high, narrow window, and looked out.

Several hundred Red-men had gathered before the laboratory. They were moving restlessly about, chattering excitedly, behaving in general like a Terrestrial mob. Suddenly they moved back from a point directly opposite the laboratory to clear a space for five men who appeared at that moment, bearing a strange machine, somewhat like the device that the two Red-men had placed in Tycho. Instead of eleven tubes and nozzles, though, this had but one—and that one pointing toward the building that held Kennard and Craig.

In a short time the machine was ready; after one of the five started it, the crowd fell far back. Again it was a beam of light that sprang toward them—but it was unlike any they had seen before. It was red, but an angry, smoldering red, flecked with minute, darting blues. As it struck the building, Kennard and Craig felt a wave of withering heat like the scorching breath of a furnace.

They flinched. "We can't stand much of that John," Craig muttered. Kennard nodded. A moment later his hand came in contact with the wall, and he withdrew it hastily, a surprised ejaculation upon his lips.

"The walls are growing hot; they're going to roast us out!"

Rapidly the heat increased, growing uncomfortable in a few moments, and fast becoming intolerable. The removal of their heavy space-suits helped a little; but in another minute the heat was greater than ever. In desperation the men swept the laboratory with their eyes, searching for a means of escape or defense.

Suddenly Kennard's roving eyes halted, resting upon a crimson cylinder that protruded from beneath one of the battered bodies. "Get one Nev!" he cried. "We may be able to do something with them. It seems to be our only chance; if the cylinders paralyze them as the one did us we may be able to stop them and their heat."

In a moment each had secured a weapon, and had returned to the apertures in the walls. Reaching out through the openings, themselves protected to some extent from the heat by the walls, they pressed on the little knob on the end of each cylinder, and waved it fanwise toward the mob.

For a split second the voice of the milling throng was stilled; then there broke upon the air a chorus of shrill shrieks of terror, and chattering cries of protest, mingled with the wildly pattering footsteps of the fleeing Red-men. Then suddenly Kennard and Craig realized that the blanket of stifling heat had lifted, that the thin air they breathed had lost its lung-searing quality. They stepped from behind the wall, and looked out through the narrow openings.

"What on earth!" gasped Craig.

The mob was almost gone. In every direction they were fleeing, wild terror lending wings to their feet. But the incredible fact to the two men was the total absence of unconscious bodies.

In a flash the answer dawned upon them. The rays from the cylinders, as they had moved through the mob, had cut great swaths of destruction in the form of disintegration! For as the beams continued darting out, Red-man after Red-man was disappearing, their bodies in some strange way obliterated. In another moment the space before the cylindrical building was empty save for the abandoned heat-wave machine; all who had escaped destruction, had fled from sight.

About to turn away, Kennard and Craig stopped short, eyes caught in wonder by the fantastic, Supra-world landscape.

World of crimson light; dying world of blood-red desolation!

The laboratory was on the crest of a little hill; the queerly desolate landscape lay before them. Cloudless, crimson sky—air that through some peculiar chemical component was likewise crimson. Two great, red orbs turning majestically about each other in the forehead of the crimson dome—smoldering suns, a dying, binary



star. Dry, parched land, rock-strewn, dusty—an endless waste of dull, red dust through which jutted the crumbling remains of ancient mountains. Nowhere was there water; Kennard thought that this accounted for the leathery, parchment-like texture of the Red-men's skins.

At the base of the hill on whose summit they were, lay a city of the Supra-world. Gleaming, crimson-metal cylinders, row upon row, stretched in a wide circle around them. It was into these that the fleeing mob had disappeared.

Bleak desolation—again the thought came to Kennard—a decadent, dying world, devoid of vegetation, of all life, save the puny, fragile, brittle Red-men.

As they turned away from the depressing view, Kennard and Craig became conscious of a terrible dryness, a consuming thirst. It may have been a mental thirst to some extent, induced by the parched landscape, but it was real, nevertheless. They were about to start a search for water when Craig remembered the supply of crimson paste that had been both food and drink to them while they were imprisoned on the moon.

A few minutes later, while satisfying their appetites and slaking their thirst, they fell to discussing the wonder of what had occurred so short a time before.

"Say, John," began Craig, "what on earth happened when we pointed those cylinders at the mob? Oh, I know they disintegrated—but how? Aren't these weapons the same as the first Red-man pointed at us? And if they are, why weren't we destroyed?"

Kennard maintained a thoughtful silence for a moment before he replied. "Well—though it's pure conjecture, I believe I've hit upon a solution. The ray that struck us, I believe, was intended to disintegrate us. It failed to do so for one very important reason. According to that apparently proven theory of ultra- and supra-worlds, a traveler into the infinitesimal would increase in density in direct proportion to his decrease in size. An infra-world being, then, would be of an inconceivably denser structure than a supra-world inhabitant.

"In our trip up to this Supra-world, we lost density in proportion to our increase in size, of course; but I believe we're still far more solid, far less wraithlike than the creatures of the Supra-world, the Red-men. And since their weapons are intended for use against creatures of their own density, they failed to affect us, except to temporarily paralyze us."

In a short while they finished their simple repast and made their way to the narrow windows again. For the moment they were undecided as to what to do; they felt that they had better be on guard until they arrived at some decision.

"Has it occurred to you, Nev," remarked Kennard thoughtfully, "that we don't know how to get back to earth? We came up here through a fluke, an accident, and we haven't a vestige of an idea how to return!"

Craig nodded gloomily. "I know it. If you ask me, it doesn't look as though we're doing a great deal—or that we are going to do a great deal. I've half an idea that we'll have to forget about returning, and be content with destroying the ray, hoping that Norcott succeeded in doing the same with the beam from Tycho."

Silent, gloomy, and almost hopeless, they gazed out over the dead landscape.

"Kennard, quick! There goes the answer!" With sudden animation Craig leaped to his feet and pointed toward the metal cylinders at the base of the hill. A slinking Red-man, the one who had greeted them upon their arrival, was moving rapidly from one cylinder to another. "If we could capture him, he could teach us to run the vehicle!"

With a sharp, "Keep on guard, Nev!" Kennard sprang to his feet, darted sidewise through the portal that was barely wide enough to permit his passing, and started down the hill in gigantic leaps.

At the first sign of movement in the laboratory, the Red-man cast caution to the winds, and broke into a dead run. But so rapid was Kennard's pace that he hadn't time to reach his destination before the man from earth was upon him.

With a single sweep of his arm, Kennard seized the puny creature, now howling with fright, tucked him under his arm, and started back toward the laboratory. It had been necessary for him to come to the heart of the City of Cylinders to capture the being; suddenly he found himself hemmed in on every side by an endless stream of Red-men that were flowing from their cylindrical homes.

Stabbing beams of radiance leaped toward him; the fragile creatures wound themselves about his legs, attempting to cast him to the ground; stones clattered against him; metal rods, light but effective, bruised his flesh; needlelike points darted at him. He staggered under the weight of those who had leaped upon his shoulders.

Suddenly he was blinded by a flash of crimson, and a steady humming drone beat at his brain. It was maddening! He felt his strength oozing from him; frantically he fought the dreaded paralysis—and conquered it!

To Kennard it looked as though a hundred, a thousand—ten thousand of the little red fiends were leaping, shrieking about him. These were the beings that threatened the earth! Of these were the two who had probably killed Norcott! Curse them! Doggedly he pushed forward.

Then something struck his bent head. A blinding pain darted through it. A brilliant flash of every color of the spectrum—and Kennard went mad!

His free hand went out, snatching, squeezing. When it unclashed, it left a bloody pulp where a head had been. His strength was amazing—whatever his hand caught was crushed flat; heads, sides, legs—all fell prey to those dreadful, grinding fingers.

But through his madness, in a lucid moment, he realized that he could not go on like this for long. The pain in his head had grown exquisite. Something seemed hammering there with regular strokes—a red-hot sledge beating at his mind. But while he could remain erect, he'd go on—and on—

There came a time when a wide circle spread about him, a space in which there were no Red-men. Swaying drunkenly, he saw them gather in a solid mass before him, slender cylinders pointing. Dimly, yet in a fleeting moment, he saw them; dimly his mind sensed them.

A solid wall of howling demons—and he must break through!

Break through! Where had he heard those words? Oh, yes, that last Harvard-Princeton game! The cheer-

ing spectators; flags waving—red flags—blood-red! Bedlam! Then the Princeton stands had roared as one man, "Break through!"

All at once the scene shifted—unaccountably. Why, those were the Harvard Reds before him now! Between him and the distant goal posts! He could see them—close together—beckoning!

Kennard crouched, his head bent low. That head was ringing, but he could still hear the cheering mob—wild, mad, high-pitched cries. He tightened his hold on the ball under his arm. Head down, arm outthrust, stepping high, he leaped ahead.

What! They were trying to tackle him? He cursed bitterly. He'd show them a trick or two! The ball was terribly heavy under his arm; his lungs were bursting; his feet weighed tons. But he had to—break through!

Gathering his waning strength, he crouched—and shot suddenly high into the air. The Reds were below him—he was past. He broke into a long, resistless dash toward the goal.

The Goal! There it was before him, strangely red! He reached it—crossed the line—and fell.

"Down, down!" he gasped—and sank into oblivion.

A FAINT, insistent voice, calling his name again and again, brought Kennard back to consciousness. He opened his eyes to see Craig's worried face leaning over him.

"At last!" the latter exclaimed with relief. "I thought you'd never recover your senses.

"That was a great fight, John—what I saw of it," he added, as he helped the groaning Kennard to his feet. "They hit you with everything they had, but they couldn't stop you." He broke off as a fit of violent coughing shook him, a hacking, tearing cough that was not good to hear. "I had a little difficulty myself," he concluded as he spit a clot of blood.

"Good gad, Nev! What's wrong?" Kennard gazed at his friend in great anxiety, his own injuries—all of a superficial nature, he believed—forgotten.

"I guess they got me, John! It's some sort of gas; it's eating out my lungs. They came shortly after you left, about twelve of the Red-men. I was watching your fight with the mob, and didn't hear them approaching from behind. They threw some kind of gas bomb, and fled. But they didn't get away; I got 'em with this little cylinder. "

"It's all up with me now, though, so I guess you'd better start back while the going's good. When you brought the Red-men in, he was almost crushed to death, but by means of threat and pantomime I got the dope about running the vehicle from him before he passed out; I'll tell you what I know so you can go back." He smiled bravely in spite of his ashen face; then another spasm of dreadful coughing shook him.

Kennard caught him as he swayed dangerously, and led him toward the vehicle.

"It's not that bad, Nev. You'll pull through. We'll rush back to the moon, and from there to the earth, as fast as we can go. You certainly need medical attention, but a good doctor can fix you up in no time." Kennard spoke with a conviction that he did not possess. Craig, he was afraid, was almost gone. Some gas, like the dreaded chlorine, was destroying the tissues of his lungs. Still, there was a bare chance that

his condition wasn't so serious after all; on the strength of that chance they'd have to get back to earth as quickly as possible, in spite of the fact that they had accomplished nothing toward the salvation of the world.

At the base of the vehicle, Kennard paused, and taking Craig in his arms, leaped through the portal. In a moment the two men were bending over the huge machine, Craig instructing Kennard in its operation.

When he had taught Kennard all he could, Craig announced his intention of descending to the workroom to lie down. He laughed at the other's quick offer to help.

"You start the vehicle down the tunnel of light. I can take care of myself to some extent, at any rate."

A few moments after Craig left the central chamber, Kennard set the mechanism into motion. The portal in the wall closed; the walls grew transparent; and the vehicle started drifting across the floor, shrinking into the red light beneath the microscope. A nauseating whirling, an almost indiscernible throbbing filled the car. Sensations similar to those they had experienced in starting toward the Supra-world. Again there was that sense of exhilaration—and the gradual return to normalcy.

Down—down—to the infinitesimal the vehicle hurtled, shrinking along the crimson pillar of light. The blackness of space— island universes—whirling galaxies—through all of these it flashed, each successive one growing larger.

Finally Kennard bethought himself of Craig, and tore his eyes away from their contemplation of the myriad wonders of space. He looked down through the transparent floor. Craig was not in sight. Probably concealed by some apparatus . . . perhaps dying!

In a moment Kennard dashed down the spiral stairs, and entered the workroom. His companion was nowhere to be seen.

"Where are you, Nev?" he cried. There was no answer.

Greatly perturbed, he hastily searched the room, calling continually; but his efforts were fruitless. Finally, despairing of finding Craig in the workroom, and deciding to search in the observatory, he was about to leave when his eyes fell on a bit of paper lying on a bench close to the room's entrance.

Quickly he seized it, a scrap of parchment-like material torn from a note-pad of the Red-men, and scanned the scrawling words written thereon. A moment, and he stood like one stunned. More slowly he read the lines again.

"Dear John, by the time you read this, you'll have covered quite a bit of the distance to the moon, and you'll probably know that I'm staying behind. I planned it all after I had learned from the Red-man how to run the vehicle. If both of us were to return, our coming here would have been in vain, for we would have accomplished nothing. Besides, the risk that would follow our leaving the microscope unguarded is too great. If the beam were cut off while we were flashing along its length, we'd be lost in size and space. But with you alone returning, I can guard the microscope until you've had time to reach the moon. I'll wait about two hours before I shut off the beam.

"I am writing this while you are lying unconscious. I'm sure you'll recover; I don't think you're

seriously injured. As for myself, I don't believe I have long to live. Better that one of us escape than that both of us die!

"I'll place the note in the workroom right after it's written; then just as you're about to start, I'll get out of the vehicle . . . Goodbye, John, and good luck—go back and rescue Norcott—and save the world.

Craig."

Craig left behind, awaiting certain death, while he, Kennard, was escaping! No! He'd go back! Madly he dashed up the steps to the central chamber—and stopped short before the machinery.

His thoughts had been arrested by a vision of a great, crimson beam cutting a terrible, desolate cincture across the earth, blotting out life, stamping cities into the ground. Slowly, reluctantly, he admitted it; Craig was right. He was needed by the world.

Sorrowfully he turned away. He felt that he had to go back for Craig; yet he couldn't render his sacrifice fruitless.

Down—down flashed the vehicle, and at last the universe that held the solar system lay below it, a little, concave lens of light. Rapidly it grew larger—and the vehicle was within it. And there, far below, was the sun, and her nine, whirling planets!

The descent from the Supra-world to the Infra-world almost completed!

On the vehicle flashed, through the crimson beam—then suddenly the tunnel of light was no more! Craig had shut it off; had removed one menace forever.

A whirling hurricane of tempestuous, cosmic forces tossing the vehicle—a wild gyrating, a mad spinning—and miraculously, the moon flashed up to meet him. A huge lever thrown back—and the vehicle landed softly on the harsh Lunar surface.

## CHAPTER VI

### The End of the Menace

KENNARD gazed through the vehicle's transparent walls in unbelief; then a satisfied smile overspread his face. Such good fortune! There, but a short distance to the south, was the crimson light, the beam from Tycho! Norcott had evidently failed in his attempt to shut it off; but he, Kennard, could do that now, since some strange caprice of fate had placed him in such close proximity to it.

But hold—what was that he saw? A great, varicolored, concave surface—a gigantic, glowing disc that filled the Lunar sky! The earth, almost touching the moon! And even at that distance Kennard could see that something was amiss on her surface; earth's face was changing! Something astounding had happened while he was away, something that had drawn the two spheres together.

Another moment Kennard scanned the altered face of the earth in fascination; then resolutely he turned away. There was work to be done. He turned a notched disc, bore down on a lever; and the vehicle started rapidly toward Tycho. And so great was its speed that it reached the huge crater a few minutes after starting.

Hastily Kennard donned his space-suit, and turned on the air-purifier—hastily, for every passing minute

meant more lives blotted out. A moment's work to create the strange portal in the wall—and Kennard leaped far and high toward Tycho.

He landed a few feet from the crater's rim; a single jump carried him up to the broken segment of the rampart to a place beside the machine that was the key to the beam's existence, a machine that had a great ray pointing from itself to the heart of the greater ray—the beam from Tycho.

He studied the mechanism for a moment, searching for whatever served to control the beam. There seemed to be nothing; no dials, levers, switches—nothing. After a moment's thought he cast his eyes searchingly about the top of the rampart. Suddenly they lit up with satisfaction; he saw that for which he sought. A great boulder that would have weighed all of nine hundred pounds on earth lay a short distance away.

Grasping the awkward, rugged mass, he bore it to the machine—and hurled it mightily at the intricate device. There was a sudden, colossal explosion; and Kennard was hurled like a leaf from Tycho's rim.

Even as he whirled above the Lunar surface, he saw the crimson beam lengthen; saw earth leap back from her satellite, dwindling to her normal size, back in her customary place in the perfect balance of the Solar system. And then the beam in Tycho vanished!

Bruised and shaken, Kennard picked himself up a few moments later, a pean of joy in his heart. He had done it; earth was free! Both beams were gone now, and the danger of future invasions was past.

But as he moved toward the crimson vehicle, his joy was tempered by thoughts of Craig and Norcott. Craig was out of it; yet it was his sacrifice that had made earth's freedom possible. Craig was gone—but there was a chance that Norcott still lived. He'd have to search for him.

Kennard reached the vehicle, vaulted through the portal, closed the opening, and started across the scarred face of the moon. The logical place to look for Norcott and the Red-men, since they were't near Tycho, was back at the point where the *Rocket* had landed. He sent the vehicle in that direction.

Minutes passed by while he flashed along high above the moon; then far below Kennard saw a flash of light—the *Rocket*, casting back the rays of the sun. Down dropped the vehicle toward it.

Suddenly Kennard leaned forward, eyes wide. There on a great, level rock, two men were fighting, a red-armored giant, twenty feet tall, and a diminutive figure clad in a space-suit. A Red-man and Norcott! The latter was darting in and out like a fantastic shadow boxer, avoiding with ease the lunges and rushes of his great opponent. Whenever opportunity presented itself, his metal-clad fist lashed out with all the force at his command; still, there could be but one result to so uneven a contest.

Hastily Kennard settled to the surface, and caused the portal to re-open. Then he leaped out.

At the first appearance of the vehicle the fighting had ceased, both combatants gazing intently at this new factor. And then, when Kennard emerged from the portal, the Red-man turned and fled.

Kennard followed at an amazing pace, clearing two hundred feet in a single bound. In a moment he overtook the fleeing Red-man; he seized him—and bent him

(Continued on page 1141)



*IT is exceedingly doubtful whether any of us alive today will get any verification of the truth or falsity of the existence of Atlantis. If Atlantis is still in existence, as many students on the subject believe it is, then what our well-known author tells us about so graphically in this instalment of the sequel to "The Drums of Tapajos" is not the least beyond possibility. At any rate, Capt. Meek assumes the truth of this "legend" with such seemingly obvious justification that there seems nothing to do, but to be convinced.*

*Attired in the silver-encrusted blue ceremonial robes of her rank, Estha was brought into the hall. . . . In a low voice she began the recital of her adventures.*



# Troyana

By Capt. S. P. Meek, U. S. A.

Author of "The Murgatroyd Experiment," "Futility," etc.

## PART II

### WHAT WENT BEFORE:

FRANK NANKIVELL, Bob Mariston, and George Duncan, ex-army officers, and Ray Willis, veteran revolution promoter, penetrate into the *tierra prohibita*, a section of the Brazilian jungle lying between the *Rio Tapajos* and the *Rio Xingu*. They find a strange city, named Troyana, which has been lost to the world for ages. It is peopled by a race of profound scientists, descendants of the ancient Trojans, who held as slaves the descendants of the inhabitants of the lost Atlantis. They are hospitably received by Nahum, an official of the city. Nankivell falls in love with Estha, his host's granddaughter.

Troyana is a benevolent autocracy ruled by the nobles under their Master. There are four classes of nobles, wearing purple, crimson, blue, and yellow robes respectively. Below these are the black-clad Burden Bearers, or Atlantean slaves.

During an annual religious ceremony, the Adoration of the Golden Calf, a revolution breaks out headed by Amos, a crimson-robed traitor. The slaves capture the lower city, while the nobles hold the sanctuary in the upper city. The fight develops into a stalemate.

Nahum learns of the attachment between Estha and Nankivell, and advises the strangers to leave Troyana. They do so, carrying Estha with them. The next afternoon she is recaptured while the rest sleep.

That night Nankivell sees her in a vision as a captive of Amos. Without waking his companions, he steals all of the ammunition and returns to her rescue, despite the sentence of death passed on him if he returns. The others return to their homes.

Nankivell gets to the lower city. Pressed by Burden Bearers, he descends into a labyrinth below the city, where he is menaced by giant toads and finds a race of richly clad people sleeping in huge crystal cylinders. He cannot open the cylinders and endeavors to return to the sanctuary. He emerges from the labyrinth to find himself in the jungle, where Gedaliah, the Warder of the Outer Ways of Troyana, is about to attack with his Indian guards, hoping to rescue the nobles. Nankivell attacks with them.

They win through to the city, but are captured by Amos. He offers them safety and rich rewards if they will join him, but they refuse. Gedaliah is led away to torture, while Nankivell is bound to the altar of the Golden Calf to await his turn.

## CHAPTER VIII

### The Priestess of the Golden Calf

IT seemed to Nankivell that he remained bound to the altar for hours. As unobtrusively as possible he tried his bonds. They did not give, but the movement, slight as it was, did not escape the attention of the guards. Two of them came over and inspected the bonds. Not satisfied, they rebound them so tightly that Nankivell had to bite his lips to keep from crying out in pain as the ropes cut into his flesh.

The agony got worse as time passed. Nankivell's head swam and he feared that consciousness was about to leave him. When it seemed that human endurance could stand no more, a long blast on a trumpet took his attention momentarily from his suffering.

Through a door on the farther side of the hall came a procession. First were a group of black-clad Atlanteans carrying weapons. Following them came ten men in the dress of the higher degrees, four in the yellow of Craftsmen, while the other six, to Nankivell's horror and disgust, wore the blue of the Planner degree. Another group of Atlanteans followed. In their midst, seated on a throne borne on their shoulders, was Amos, attired in the crimson robes of the cryptic degree. On his breast blazed the golden jewel of the Master of the Crimson Degree. Before him were born emblems on staffs, attesting to his rank.

With a fanfare of trumpets, the procession moved forward to the altar. Amos' throne was set on the dais on which stood the Golden Calf. He spread out his hands and gave a command in Atlantean. The whole assembly sank to their knees, the Planners, to Nankivell's amazement, also worshipping. He looked keenly at the blue-clad figures and the truth burst upon him. Not one of them had been born to the blue nor raised by the Council to the rank his dress purported. The mockery was one of the steps by which Amos had sought to bind to his banner the few of the Craftsmen degree who had followed his fortunes.

Again the trumpets sounded. The assemblage rose and formed in orderly ranks. Through another door came a dozen Atlanteans bearing a litter. They approached the altar. Nankivell cried out in horror as he saw their burden. It was the form of what had been Gedaliah, but the Warder of the Outer Ways had been through the fires of Atlantean torture. His twisted limbs, scorched skin, and pain-wracked face bore witness to the suffering he had endured.

At a word from Amos, Nankivell was unbound. Held helpless in the hands of four guards, he saw the form of Gedaliah lifted and bound to the altar, his back bent over the curved stone until it seemed that the skin on his chest would crack under the strain put on it. Not a sound came from the Warder's lips as he underwent the new ordeal, but the spasms of pain which crossed his face were eloquent. There was a hush of expectancy.

A third blast came from the trumpets. Coming across the hall, Nankivell heard the tramp of a body of men. Amos rose from his throne and stepped forward.

"Granddaughter of Nahum," he said, "Are you prepared for what you must endure?"

A haughty voice answered in tones of scorn.

"My answer was given to you hours ago, traitor."

Nankivell gave a sudden leap and almost tore himself free from his guards.

"Estha," he cried.

He could turn enough to see her. Clad in her regal blue, the granddaughter of Nahum stood guarded by a dozen Atlanteans under the command of a figure in a blue robe. Tall and queenly she was, her black eyes flashing scorn at the men around her. Her black hair, caught around her head by a jeweled fillet, rippled in waves down her shapely back. Her blue robe with its silver embroidery emphasized, rather than concealed, the perfect lines of her girlish figure. Nankivell's heart gave a leap as he saw her.

At the sound of his voice, she started and looked at him. A wave of color surged over her face and she involuntarily took a step toward him. She caught herself and gave him a glance of contempt.

"You think to fool me again with a dummy?" she asked of Amos.

The Master of the Crypt gave an evil smile.

"How greatly you err, you will learn later," he said, "when you see this thing torn limb from limb. Know you him on the altar?"

Her gaze fell for the first time on the altar before the Golden Calf. An expression of pity and horror crossed her face.

"Gedaliah!" she cried. "Is it you?"

"It is I, Estha," came in muffled accents from Gedaliah's thickened lips. "Grieve not for me. I have been loyal and no man can ask more of life than the approval of his conscience. My sands are run out. Pity Brother Nankivell yonder for what you and he must now face. My ordeal is nearly over."

"Is it he, Gedaliah?" asked Estha in horror.

"Alas, Estha, it is. He came with me in an attempt to rescue you, but their might was too great for us. Now we will die."

Estha shuddered and hid her face. Amos approached Gedaliah.

"Warrior of the Outer Ways," he said in a perfunctory tone, "have you made your last decision?"

"I have, traitor and renegade," replied Gedaliah, "Do your worst!"

Amos raised his hand. From far away came a sound of singing. It started on a minor note, faint and far-distant. Slowly it swelled until it filled the whole hall. The spot of light on the forehead of the Calf began to flicker as if the image were filled with an internal fire. Amos divested himself of his crimson robe and stood forth in the barbaric trappings of a high priest of the abomination before him.

Nankivell watched with a gaze that was almost hypnotized as Amos slowly approached the bound figure. The singing died away. Amos faced the assembly, raised his hands above his head and began to intone a prayer in Atlantean. The spot of light glowed strong and steady now, with a flame brighter than light itself. Its radiance filled the whole hall until it was lighted as though the sun were pouring in.

AMOS ended his prayer and faced the bound figure. The singing started again in a low wail, but through the semi-silence broke a strong voice.

"I, who am about to die, make prophecy!" it declared.

A shudder ran through the assembly. Nankivell realized that it was Gedaliah speaking with a voice that was strangely clear and strong.

"On you, Amos, apostate, arch-traitor, and recreant, I pronounce the doom that is yours. May the penalties of the oaths you have violated be wreaked upon you. May your tongue—"

Amos shuddered at the doom which the dying man passed upon him, but the voice went on relentlessly.

"I see a light that is greater than this. It is the light which carries the doom of the Golden Calf. I see the idol rising in flames of strange light. In its destruction, it carries with it him who—"

The voice ended in a shriek. Amos could stand the malediction no longer. The sacrificial knife with which he was armed cut short the words of doom from the altar.

A shudder passed over the assemblage as the shriek rang out. It passed in a moment and wild cries of hate and triumph rose in the hall, drowning out the singing voice which had risen almost to a frenzy as the blow was struck. Amos rose and faced his followers, the bloody knife in his hand. His deep voice could be heard even above the tumult.

"So die all who oppose the Golden Calf!" he cried.

As the tumult died down, he turned to Nankivell.

"My vengeance, as you see, strikes surely," he said.

"You know the fate that is in store for you. Now is the time to say whether you will die as this man has died or join me. Behold your reward!"

He pointed to Estha.

"Will you take what I freely offer you and with it place and power, or will you choose to see her fair form torn and ravished by my followers before the shattered remnants are bound to that altar and sacrificed before your eyes? Speak, for your time is short!"

Nankivell looked at Estha. She had drawn herself up and was surveying her guards with an air of regal indifference. For a moment he was tempted to appeal to her for counsel, but he knew in advance what one born for generations in the blue would answer. They were loyal to the core, those nobles of Troyana, all save the traitor who stood before them.

"I'll meet you half way, Amos," he proposed. "Send Estha in safety to the city and I'll join you and do the best I can to help you. That is the most I can offer."

"I accept no compromise. Either you go to the sanctuary with her, and there do as I bid you and answer for her silence, or the doom I have spoken will fall on you and on her."

Estha's voice answered him.

"Why waste your time, Amos?" she asked, contempt written large in her tones. "I have given my heart to no traitor or coward. Think you for a moment that we would not suffer any torture that your fiends can imagine rather than see the same doom fall on everyone in the sanctuary? You have just witnessed what one Planner can endure without a whimper of pain. Now you will learn what a woman of that same race can stand. Do your worst. We defy you."

\* Author's note:—For obvious reasons, a portion of the dying curse of Gedaliah must be omitted.

Nankivell hesitated no longer.

"Go ahead and start your rough stuff, Amos," he said with an effort at his usual tone of light-hearted raillery. "I reckon we can stand it if you can."

His reward came in Estha's look of pride. Amos' face was a picture of baffled fury. He turned to his Atlanteans.

"Strip her clothing from her!" he cried.

The guards closed in hesitatingly on Estha but she forestalled them. With the speed and grace of a frightened deer, she sped through a gap in the line of guards. Straight for the dais she ran and bounded lightly up the steps. None of the Atlanteans pursued her. She took her station directly under the Golden Calf and faced them.

"The game is not played out yet, Amos!" she cried.

With a swift motion she stripped the blue robe from her. Her hands went to her head. A gasp of amazement went over the hall. Under the blue robe she had worn the scanty draperies, studded with gems, of the High Priestess of the Golden Calf. About her waist was a girdle of jewels from which strings of sparkling gems hung half-way to her jeweled anklets. Her hair was powdered with gold and hung free from a fillet which scintillated with the fire of a thousand gems. Showers of gleaming points of light hung pendant from each side of the fillet over her gleaming shoulders and were caught in a bunch before her.

Amos sprang toward her but before he could touch her, her voice, vibrant now with power and majesty, rang through the quiet hall.

"Behold, ye people, and worship!" she cried. "I am the Priestess of the Golden Calf, the Mother of the Holy Fire, without whose sanction, no sacrifice is lawful. On those consummated without my authority, I pronounce the doom of murder and unavailing sacrifice. To me alone, ye owe allegiance and honor. Woe to the one who disputes my will. Woe and woe and woe to him who dares to lay sacrilegious hands on me or to disobey my commands. On him I pronounce the doom of the Calf, that he shall hear the drumming of the hooves, the hooves that shall rend his flesh through all eternity!"

She paused and a murmur of fear rang through the hall. Steeped for centuries in the superstitious worship of the Calf, fostered by the nobles of Troyana, their life-long training enforced obedience to the orders of that slim girl before them, the holy priestess whom they had ever revered. Amos gave a cry of baffled rage. Sacrificial knife in hand, he faced his followers.

"Seize her!" he cried. "The old order has passed. She is not now the priestess of the Calf, she is a rebel against our power. Seize her, for only by her torture can we win to the sanctuary and everlasting life!"

A few of the Atlanteans started irresolutely up toward the altar, Amos in the lead. Estha's ringing voice stopped them.

"Stop!" she cried. "Reflect on what you are attempting. If you set foot on this holy spot, the Calf will blast you into nothingness and your souls will go to torment. Down on your knees and worship!"

A majority of the Atlanteans sank to their knees. The rest stood irresolute. Estha threw back her head and started to intone as though in prayer. Nankivell gave a start as her voice rang out. She spoke in English.

"Frank," she called in a sing-song voice, "listen carefully. No one here but you and Amos can understand

me. I am going to perform what will be taken for a miracle. As soon as their attention is drawn go to the left of the dais. You will find a character 'aleph' on the wall. Put your right thumb on the juncture of the two main lines and your fingers in each of the four points. Press in and turn your hand to your right. A door will open. Pass through it. It will close automatically. Go straight forward until you come to the end of the passage. Wait there until I join you. Nod if you understand."

Her voice ceased and she looked at him. He nodded vigorously. Amos gave a cry of rage.

"Listen, ye people!" he raged. "She is planning to betray you and to escape with her lover. Let me tell you what she said!"

Estha's voice cut in sharply.

"Hearken to the words of the High Priestess of the Calf!" she cried. "Amos has disputed my authority. Let the Calf choose between us. I will pray for a sign. Keep him silent lest his clamor disturb the God."

She turned to the image and threw back her head. This time her speech was in Atlantean. Amos strove to resume his speech, but the hand of an Atlantean over his mouth silenced him.

"Oh, Most High and Holy, Visible Godhead, in Whom is all power, all glory, and all hope," she prayed. "Look down on these, thy humbled worshippers, who are about to be led astray by the tongue of irreverence. I, your High Priestess from of old, have ordered that he be bound to the altar as a sacrifice to the God whose majesty he has disdained, and on whose altar he has offered unholy sacrifices, sacrifices steeped in sin instead of the sacrifices of innocence which I have ever offered on thy altar."

"Look down on these, thy followers, and give a visible sign that all may know that I am still thy priestess, and that my orders are still thine. Nod thy head, Oh, Most High and Holy, that all may see!"

A gasp came from the kneeling Atlanteans. The spot of light on the head of the image began to change color. First red, and then green it glowed. Strange lights flickered over the image, making a halo of flame about it. Nankivell watched, absorbed. Slowly the spot of flame died away and the head of the Calf could be seen only in the nimbus of flame which surround it. As they watched, the head of the image bent forward and bowed. Estha's voice rang out in triumphant prayer.

"Oh, Most High and Holy," she cried, "I thank thee for this sign thou hast vouchsafed that all may know thy will. She switched suddenly to English without a break in her tone. "Hurry, Frank, while the spell is still on them." She continued the prayer in Atlantean.

NANKIVELL came to with a start. He had been half hypnotized by the play of lights and had stood immovable while the head moved up and down. At her words, he looked around. He was standing alone. All of the guards were on their knees, their eyes uplifted in adoration. He stole silently through the line of guards until he reached the platform. He made his way along it to the left, his eyes searching for the symbol. At last he found it.

He placed his right hand as Estha had directed and pressed in with a right-hand twist. There was no result. He released the pressure and replaced his hand with the greatest care. With a sudden effort he threw his weight

## CHAPTER IX

## Escape

against it and twisted. His fingers slipped on the surface of the stone, but no door opened before him.

"It won't open, Estha!" he cried.

His voice broke the spell which had held all, even Amos, spellbound.

An exclamation of surprise tinged with vexation came from Estha.

"Press very lightly and turn slowly!" she cried.

The spot of light on the head of the image blazed out blindingly, filling the room with light. The Atlanteans, released from the spell which had held them, gazed about. They saw Nankivell at the edge of the dais. With cries of wrath, his guards rose and charged toward him. Amos, followed by a dozen, raced up the steps to the platform.

Nankivell strove to keep his head cool and his hand steady.

Then, as slowly as though there were not over a hundred black-clad figures racing toward him with cries of rage, he placed his fingers in position. He pressed lightly and turned as slowly as he could. To his joy, a section of the wall moved silently in, leaving a gap through which he could pass.

"All right, Estha!" he shouted. "It's open. Are you safe?"

There was no answer. He started to turn back, but the pursuing Atlanteans were between him and the steps up the dais. The nearer ones were brandishing flash-tubes which they might use at any moment. The recollection came to him of a similar scene when Estha had made her way to safety while he and his companions, who had striven to rescue her, had been marooned for hours in the labyrinth below the sanctuary.

"Even if they capture her, I'd better make my getaway," he reflected. "If I'm safe, I may be able to rescue her. Captive, I'm just that much more trouble for her."

He hesitated no longer, but rushed in through the opening. The block of stone had moved back eight feet and then slid to one side, leaving a tunnel open before him. At full speed he rushed into the darkness, the pursuing Atlanteans at his heels. He passed the block and instinctively sought for a closing lever. The thought of Estha's words came to him.

"The door closes automatically," she had said.

He ran on into the darkness. A grating sound from behind made him turn. The block had moved out, securely barring the way to his pursuers.

"Oh for my flashlight!" he groaned.

The darkness before him was absolute. He held one arm before him to warn him of obstacles and made his way forward, an inch at a time, his foot feeling for irregularities in the floor.

For fifty yards he made his way before his outstretched hand encountered stone. His hands told him that he had come to the end of the passage. He settled himself to wait but there was no need. He felt the solid block of stone rising slowly. His hand told him that it had risen to the height of his head. He took a step forward.

A gasp came from the darkness.

"Is that you Frank?" came Estha's voice out of the obscurity.

"Estha!"

In another moment she was locked fast in his arms, as though that were the final haven.

FOR a few moments, neither could speak. Estha found her voice first.

"Did they hurt you, Frank?" she asked anxiously.

"Not to amount to anything," he replied. "They were too busy with Gedaliah to pay much attention to me. It was my turn next, I fancy, if you hadn't thrown a monkey wrench into the gears. Did that brute use any violence on you?"

She shuddered in his arms.

"He struck me twice," she said. "When I was captured, he tried to fool me with a dummy, but I saw through it. He didn't dare to try violence again, for some of the Atlanteans murmured at such treatment for one they had always been taught to reverence. That was what gave me the inspiration to bribe my guards to get me a set of regalia as High Priestess. I wore it under my robe."

"It saved the day," cried Nankivell. "Hadh't we better be moving on? Amos can open that door as well as I could. He heard your directions."

Estha laughed.

"I know more about the sanctuary than he does, Frank," she said. "He can work at that door until he gets tired. Nothing short of removing the stone will open it now. Tell me, did Bob Mariston come back with you?"

"No, I came alone."

Estha sighed.

"Poor Balkis," she murmured.

Before Nankivell could question her, she seized his hand.

"We had better go on," she said. "We have a long journey before us."

"Isn't the sanctuary directly overhead?"

"Yes, but you certainly remember that every elevator from the amphitheatre to the sanctuary was sealed, don't you? If they had been left open, Amos would have used them long ago."

"Of course. I had forgotten. How will we get there?"

"There is another road which I can find. We will have to pass through the part of the city he controls, but the path is a secret one. I don't suppose you have a light?"

"No, and no weapons."

"I don't think we'll need them. I know where to get an X-ray torch, but I don't dare use it to light our way. It wouldn't last. Keep your hand on my shoulder and I'll lead."

Nankivell placed his hand on her bare shoulder and followed her. She stepped out confidently. Presently the path made a sharp turn to the left.

"The X-ray torch should be here," she said.

There was a sound of hands moving over the rock.

"I have it," she exclaimed. "Now follow again."

She threaded her way through a winding maze of passages. At last she paused and intoned a sentence in Hebrew. There was a scraping noise in the darkness. "This is a conveyer," she whispered. "Follow me and sit down."

Nankivell moved forward a few paces and stifled



an exclamation as his shin came in contact with a hard object. His hands told him it was a seat.

"Are you all right?" she whispered.

"Right as hops," he whispered as he sank in the chair.

He felt the car move slowly forward. For three or four minutes the motion continued before the car stopped. Estha spoke in a guarded whisper.

"We must cross an open room," she said. "It is a storeroom in which power units used to be kept. It may be guarded, but I hope not. I'll look through the wall with the torch. Watch."

There was a dull click as she turned on the torch. The wall before them was illuminated with a brilliant spot of light. Gradually the stone seemed to grow tenuous and disappeared. They looked through the apparent hole into a room. It was empty. In one corner was piled a quantity of flashtubes, and in another corner were empty racks.

"Amos has either taken the energy units to a safer place or has used them all," she commented. "I'll open the door and we'll race across. The other conveyer we seek is to the left of that pile of tubes. You might grab three or four as we pass, they may come in handy."

"I'll get an armful," he replied. "I'm ready if you are."

Instead of replying she shut off the torch and spoke in Hebrew. The wall before them slowly rose, leaving the way open into the magazine. She stepped out lightly, Nankivell at her heels. She ran across the room and facing the opposite wall, began to recite the formula for opening the second door. Nankivell turned his attention to the tubes. He stooped and picked up four of them when his gaze fell on something which brought an unbidden cry of joy from his lips. In the far corner of the magazine stood his rifle, his belt with two automatic pistols in the holsters and the bandoliers of spare ammunition piled up on the floor beside it. "Three rousing cheers!" he chortled. "This is better than a thousand flashtubes."

It was the work of a moment to cross the room and fasten the precious belt about his waist. With the bandoliers and rifle in his hand, he followed Estha through an opening in the wall. On the threshold he paused and turned back. He slung the bandolier over his shoulder and picked up a flashtube.

"Here, Estha," he said as he rejoined her. "Here is a weapon for you, unless you prefer one of these pistols."

"Keep them, Frank, you are more skilful with them than I am. I'll take the tube. Thanks be to the Great Architect, we have safely passed the first hazard. One more and we will be safe."

The trip in the conveyer was a duplicate of the first one. When the car stopped, Estha spoke guardedly.

"This is the most hazardous part of the trip," she said. "We must enter a commonly used passageway and go down it for a hundred yards to find an elevator to take us to a higher level. We are now four miles from the amphitheater. Once we get to the upper levels, the trip is simple. Watch while I use the torch."

Again the rock wall faded and they could see before them a typical corridor of the lower city. It was empty.

"All right, follow me at a run!" she cautioned.

The door opened and Nankivell followed her into the

passageway. She turned to the right and ran like a deer down its length. In a hundred yards they came to a cross corridor. Without pausing, Estha turned to the left and disappeared from Nankivell's sight. From around the corner came a piercing scream, followed by a muffled blow. Nankivell spurted desperately and rounded the corner. Before him was Estha, gripped in the hands of three Atlanteans.

Without stopping to reckon the cost, Nankivell threw himself on them. His attack was unexpected and the first one went down before his fist. The other two released Estha and sprang back, drawing flashtubes from their robes.

Nankivell gave them no time for thought. He charged and threw his arms about the nearer one. He whirled the black-clad figure from his feet and crashed him to the ground. The Atlantean threw his arms and legs about Nankivell and strove to hold him. The third man leaped forward with leveled flashtube.

As he did so there was a blinding flash and a terrific roar. The Atlantean vanished, blown literally to bits by the discharge from Estha's tube.

"Break loose, Frank!" she cried, anxiously.

Nankivell put forth his strength and strove to follow her orders. His first attack had caught the Atlantean by surprise and he had thrown him, but his muscles were no match for the enormous ones of the Bearer of Burdens. For all his desperate fighting, he could not tear himself loose from the bone-crushing grip which held him.

Nankivell's breath began to come in gasps. From the corner of his eye he could see that the man he had knocked down was getting slowly to his feet. His brain worked at top speed and he suddenly saw his way clear. With a sigh, he relaxed in the terrible grip and allowed his muscles to go limp.

The Atlantean crushed him closer for a second and then with a grunt released his grip. Swift as a striking snake, Nankivell's hand sought his holster. An automatic barked twice and he rose. Both Atlanteans lay writhing on the floor.

"Quick, the elevator!" he gasped. "This racket will call others."

Estha ran a few steps and began to seek for a sign on the wall. A shout came from a distance. Nankivell whirled and saw a dozen black-clad figures running toward them.

"Get the elevator open as quickly as you can, Estha," he cried. "I'll hold these brutes back for a while."

He unsling his rifle and dropped prone. He cuddled the stock to his cheek and covered the nearest of the oncoming men. He squeezed his trigger but a sharp click was the only result. With an oath he threw himself on his side, his right hand fumbled at his belt.

THE nearest Atlantean was less than fifty yards away when he rammed home a clip of cartridges and rolled over on his face. This time the pressure on the trigger was rewarded by an earsplitting crack and three of the black-robed figures fell. At that short range, the heavy Springfield bullet had drilled its way through them all.

As rapidly as he could work his bolt he fired. The weapon did horrible execution. The Atlanteans strove to return his fire with discharges from their flashtubes, but at that range, while he received a terrific shock, the

tubes did not even graze him. When his rifle was empty, but three of his assailants remained on their feet and they were retreating up the corridor as fast as their legs would carry them.

"Come, Frank, I have it open!" cried Estha.

He leaped to his feet and ran toward her. Two hundred yards ahead he could see another group of Amos' followers approaching. They were too far away to interfere and he wasted no time on them. He jumped through the opening in the wall. Estha had her hand on the control lever. No sooner had he entered than she jerked it. The car started up.

It rose rapidly for a moment and then stopped with a sickening jar. Estha looked at the control board and gave a cry of dismay.

"What's the matter?" asked Nankivell anxiously.

"Matter enough," she replied. "I was afraid of this. Amos has guessed how we were escaping and he has shut off all power. Every one must be out of the lower levels so that he can stop the air compressors. He could not shut off the power here without stopping every piece of apparatus in the lower city."

"Well, that isn't so bad, is it?" asked Nankivell. "There are no stairs in Troyana so he can't get above us. He can't keep everything shut down indefinitely, or if he does, Zephaniah will be down on him like a ton of bricks. As soon as he starts anything, we'll go on up."

"It isn't that simple, Frank. In a few minutes, if no power is supplied, this elevator will sink back down to the level it started from. It's magnetically operated, you know, and there is nothing but residual magnetism to hold it up. Right now it is sinking slowly. He can open the door with a local source of power from batteries and we'll be recaptured."

"It will cost him something to do that," said Nankivell grimly as he reloaded his rifle. "I've got about a hundred and thirty cartridges left, besides my pistol ammunition. They may get us in the end, but they'll know there's been a battle when they do."

A sob escaped from Estha.

"Oh, Frank, I'm so sorry," she wailed. "I did the best I could and I thought we would win through. It's all been useless."

"Not by a long shot, it hasn't," cried Nankivell as he put his arms about her and drew her to him, kissing away her flowing tears. "We've had a few minutes together and we've had a bully scrap and we're due for a final blowup that will beat anything this old burg has ever seen. Here, sweetheart, take these pistols. I'll have my hands full with the rifle. When we land, give 'em hell. Save one shot for me. I don't care to fall into Amos' hands alive. You had better use one for yourself, as far as that goes."

"Never fear, I will," she said, grimly, as she took the pistols. "I'll prove worthy of you, I hope."

Nankivell drew back against the far wall of the elevator cage, his rifle held ready. It was evident that the conveyance was slowly dropping. Estha slipped the safety locks off the two pistols and joined him.

The minutes passed with excruciating slowness.

"How long will it be before we land?" he asked.

"Not long now," she replied.

He raised his rifle, watching closely for a sign of an opening. Estha gave a sharp cry.

"Here, Frank, take these!" she exclaimed, thrusting the pistols toward him. "Take them quickly. I had

forgotten. We're saved after all. There is a means of communicating with the sanctuary in this car."

She turned to the side of the car and twisted feverishly on a tiny projecting knob, so small that it would have escaped notice had she not known exactly where to look for it. It responded to her manipulation and a door opened in the cage. In a recess cut in the rock was a strange looking instrument. With trembling hands she picked up a tiny bit of metal and inserted it in a slot. There was a whirring sound from the instrument and a spot of green light began to glow. She watched it with bated breath. There was a click and it turned to red.

"Thanks be to the Great Architect!" she breathed.

She spoke slowly and distinctly toward the red disc.

"Who is on station?" she asked.

A faint murmur, so low as to be almost inaudible, answered her.

"Daniel," it said. "Who calls and from where?"

"Get Nahum or Zephaniah," she said in a voice of command. "This is Estha, Nahum's granddaughter."

An exclamation of surprise and incredulity came from the instrument.

"I will send for the Master," said the voice. "He will be here in ten minutes."

"That will be too late," she replied. "Get any of the blue degree."

"There are none here, Oh, Estha, and I can get none soon."

"Then listen. I am trapped in emergency elevator RV2. It is powered from the lower city and Amos has shut off all power. The car is slowly falling to the lower levels where he is waiting for me. Apply emergency power from the sanctuary at once."

"I dare not do so without orders from Zephaniah," was the answer. "We have too little power to waste any. Besides, how do I know that you speak the truth?"

"Fool!" she stormed. "Know you not my voice? Turn on emergency power at once or Nahum will have you stripped of your yellow robes and degraded to the rank of Burden Bearer."

"If I give you power, what will you do?"

"I will take a conveyor direct to the sanctuary. You can guard the entrance and see that I am the person I claim to be. Hurry, we are almost at the lower level."

There was a moment of silence.

"I never heard of the elevator you speak of," said the voice at last.

"Of course you didn't. Only Zephaniah, Nahum and I know of it. Turn on power on the general emergency lines and we will be safe. Delay no longer."

Again came a pause.

"The matter is beyond my knowledge and wisdom," said the voice. "I will report the matter to the Master and be guided by his orders."

The red light faded from the disc. It turned green for an instant and then the glow faded away. Estha turned to Nankivell, her face a picture of despair.

"Our emergency communication power is gone, so I can't communicate with Zephaniah, even if he arrives in time. In ten minutes, Daniel says. Well, in ten minutes, we'll be dead or prisoners in Amos' hands. We're falling faster now."

Nankivell glanced at the sides of the shaft. There was no doubt that the car was falling at an accelerated rate. He raised his rifle with a grim air.

"Don't shoot 'till you see the whites of their eyes,

girlie," he said. "Oh, Mamma, won't it be a lovely war?"

## CHAPTER X

### The Trial of Nankivell

"CAN you turn off the lights, Estha?" asked Nankivell, presently. "We would have an advantage if we were in the dark."

"No, I can't. It's a radium bulb, you know. Perhaps you could cover it with something."

Nankivell laid down his rifle and tore a section from his shirt.

"I'll lift you up," he said. "Try to wrap this around it."

He lifted her until she could reach the roof of the car. The bulb projected slightly and she soon bound the fragment of shirt around it. The interior of the car was in almost total darkness.

"Good," said Nankivell as he lifted his rifle. "As soon as a line of light shows the fun will start."

They waited, their nerves at terrific tension. Presently a hairline of light showed at the floor of the car. They had fallen so far that the bottom of the car cleared the top of the entrance. Amos' men had removed the stone slab which shut the elevator shaft off from the corridor.

Nankivell raised his rifle and took aim. Through the rapidly widening crack he could see forms moving. He picked out one form and fired.

The rifle went off with a deafening crash but the bullet never reached its mark. Even as he fired, the car gave a lurch and started up at express train speed. He and Estha were thrown flat on the floor, pressed down as if by a weight. With a jerk which raised them clear of the floor, the car stopped.

"The power came on just in time," gasped Estha. "Our controller was set at maximum speed."

Nankivell rose to his feet and recovered his rifle. The shock of the rapid start and stop had torn the shield from the light.

"Now what?" he asked.

"The sanctuary!" cried Estha, joy in her voice. "Oh, Frank, dear, the last barrier has been passed and we're safe."

Nankivell caught her to him in an ecstasy of happiness.

"Wait, Frank," she said, "I've got to jam this elevator before we leave."

She turned to the controller handle and removed it from the panel. She fitted it to another shaft on the control board and gave it a full turn. There was a blinding flash and a cloud of smoke.

"The control is destroyed," she said, "so the car can't be started from below. Amos won't use this entrance to the upper city. Now for home."

He followed her from the car into a vaguely familiar passageway.

"Don't you know where we are?" she asked with a laugh. "We're right under our old home. This is the conveyer we always use to the sanctuary."

She opened a door in the wall and they took seats in the conveyer which was revealed. When it came to a stop, Estha turned a lever on the wall. A huge block of stone rose. Nankivell, who held his rifle ready,

dropped it with a cry of joy. In a half-circle before the opening were a dozen men armed with flashlubes attired in the yellow of Craftsmen. In the center of the line was a blue-robed man on whose breast flashed a brilliant jewel. On his face was an air of power and majesty.

"Grandfather!" cried Estha.

She threw herself into Nahum's arms. Nankivell followed her slowly. A Craftsman stopped him with a leveled flashtube.

"Remain where you are, Keeper of the Crypt, until we have orders. We were to admit one."

Nankivell stopped in his stride. Besides Nahum, only Craftsmen were present. The Junior Warder released himself from Estha's embrace and looked sternly at Nankivell. His deepest eyes flashed as he stepped forward.

"Kidnaper and traitor!" he said slowly. "I am glad you have returned to your punishment!"

"Kidnaper?" cried Nankivell in surprise.

"Yes, thief of your host's child," replied Nahum. "You, who stole her from her home—"

"Wait, Grandfather!" cried Estha imperiously. "Wait before you speak so to the man to whom I owe my safety. I went with him of my own free will and accord. If anyone is to be punished, it is I. I was the one who violated your commands and persuaded him to take me with him."

An expression of bewilderment came over Nahum's face.

"You went with him willingly?" he asked slowly.

"I certainly did. In fact, I made up the plan which got me out of the city disguised as his dead servant. Now, punish me as you wish."

Nahum bowed his head in thought. When he raised it, the anger was gone from his face and there was the suspicion of a twinkle in his eye. He stepped forward and extended his hand to Nankivell.

"Brother Nankivell," he said ceremoniously, "I apologize for my hasty words. I should have known better. Knowing Estha as I do, I should have realized that she was back of it all. I doubt whether anyone *could* make her do anything she didn't wish to."

"I haven't tried so far, Brother Nahum," laughed Nankivell as he wrung the aged Planner's hand. "Whenever we have different ideas about anything, we always compromise and do as she wishes."

Nahum's face broke into a smile, but grew suddenly grave again.

"I'm glad to see you back, Frank," he said, "yet it is my duty, an unpleasant duty, I'll confess, to place you under arrest. While you are cleared of the charge of kidnaping, yet you have returned to Troyana after the way had been closed to you. You are no less a rebel against the Master's authority than is Amos. You know the punishment."

"Death, of course," replied Nankivell, "yet only after trial by the Council. They may not press the matter when they learn why I returned. If they do, at least I have rescued Estha."

"Rescued her?" asked Nahum. "Rescued her from what?"

"It's a long story, Nahum, too long to be told here. If you'll take me to your quarters as a prisoner, I'll be glad to tell the Master the whole thing. I have information about Amos which may be useful."

"Follow me, then," said Nahum. "Brother Daniel,

inform the Master of Brother Nankivell's return and ask him to come to my living quarters. I will assume responsibility for the prisoner."

In Nahum's quarters, Nankivell told his story to Nahum and the Master. When he had finished, Zephaniah sat a while in thought.

"The matter is a serious one," he said, "and I order that you be brought before the Council for trial. I hope their verdict will be favorable."

"Thank you, Most Worshipful Sir. In the meantime, I am a prisoner?"

"No. There is no way you could escape if you wished. Take your place among the brethren until you are summoned for trial. That will be tomorrow night, I think."

"At which time," said Nahum, "I myself, will conduct his defense."

"So be it," replied Zephaniah.

Nankivell spent the day in going about the city and greeting his many friends. Without exception, they expressed joy at his return, but shook their heads ominously when he mentioned the trial which was to take place. In the history of Troyana, no man had ever disobeyed the Master without paying the last great penalty. Nankivell's spirits fell, and it was with a glum face that he faced the assembly which was to decide his fate.

THE Council was opened in full ceremonial. Nankivell obeyed the summons and took his place in the seat of justice before the altar. Fairly and impartially Zephaniah rehearsed the scene of a few days before when Nankivell and his three companions had been given their choice in the presence of the full Council, of residing permanently in Troyana or of leaving for the outer world, without possibility of ever returning.

"Brother Nankivell, at that time you made your choice. Was this choice made of your own free will and accord?"

"It was, Most Worshipful Sir."

"What was your choice?"

"To leave the city, knowing that I could never return."

"Did you return of your own free will and accord, knowing the penalty of your act?"

"I did, Most Worshipful Sir."

"Yet you must have had reasons. What were they?"

Nankivell hesitated. Nahum broke in on the silence.

"Most Worshipful Sir," he said, "although it is one of the ancient landmarks of our government that a woman can never appear in the Council, I ask that this Council be formally dissolved for a time as such, in order that my granddaughter may bear witness. She left with him and returned with him. She will tell things that he cannot."

"It is so ordered," answered Zephaniah.

Attired in the silver-encrusted blue ceremonial robes of her rank, Estha was brought into the hall. A gasp went up from the ranks of the Planners as their eyes took in her sheer loveliness, enhanced as it was, by every art known to Troyana women.

In a low voice, she began the recital of her adventures. She told how she had thought up the plan of escaping with Nankivell disguised as the corpse of Pedro, the Indian guide who had given up his life in the city's defense. When she began to tell of their first afternoon in the jungle, her voice came clearer.

"We all lay down to sleep except Brother Duncan who remained on guard. I watched him. In a few

minutes it was evident that something was affecting him, for he walked as though he were in a daze. I strove to rouse Frank and the others, but my will was paralyzed and I couldn't. Slowly Brother Duncan's head drooped and he slumped down into a sitting position. Then, against my will and impelled by some outside force, I rose and went into the jungle.

"I knew that a force was playing on me and thought it was from the sanctuary. I walked a short distance and then sleep overtook me. When I woke, I was in the lower city, with Amos leering at me.

"I won't tell you the shameful proposals he made me, for his crimes are already great enough for any punishment that can be meted out. Not the least of the indignities to which I was subjected was that I was whipped with leather whips. I—Estha—the granddaughter of your Junior Warder—one born in the blue for countless generations—was whipped like a slave in the presence of Burden Bearers. Look, Wearers of the Blue, and see what one of your degree suffered!"

With a sudden motion she ripped the blue robe from her shoulders and displayed her back to their gaze. A murmur of wrath and horror ran over the assembly at the sight of two red welts. Estha threw her robe over her shoulders.

"Is there a man among you who would not have risked all and dared all to come to my rescue, had you seen those blows struck?" she cried.

A shout assured her that there was not one.

"Brother Nankivell saw those blows struck! Amos wished to get him into his power and he used some of his few power units to project that scene into the jungle before my lover's eyes. As any of you would have done, he dared everything and came to my aid. Knowing that death might be his portion, he did what a brave and loyal friend would do. He stole away at night without rousing his companions, that he alone, might bear the penalty for returning.

"Alone and unaided, he made his way back into impregnable Troyana to save me from the clutches of that demon. How well he succeeded, the fact that I stand before you bears witness. Would a man among you have been able to do what he did? To have taken me single-handed from the midst of Amos' hordes and brought me safely to the sanctuary? Let your consciences answer!

"Say, Wearers of the Blue, what punishment shall be awarded to this man? What is the punishment given by the nobles of Troyana to one who is loyal to the end and whose only crime is that he gave up safety to return to share your fate, after rescuing one of your number from worse than death? Speak, for whatever his fate, know that I will share it!"

A roar answered her. The Planners of the Council were on their feet clamoring for a vote. Zephaniah hammered lustily at the gong before him. Silence suddenly fell and all eyes were fixed on the Master.

"Nobles of Troyana," he said in a ringing voice, "my decision is made. No punishment shall be awarded to this brother. To him I extend the right hand of fellowship and with it a welcome back into the city that is to be his home forevermore. By virtue of my authority as Master of Troyana, I so order it!"

"So mote it be!" came a deep-toned chorus.

Estha swept triumphantly down the hall and out. Zephaniah quickly reconstituted the Council.



"You have heard my decree," he said. "Not less than a three-fourths majority may overthrow it. If it be overthrown, the oriental throne becomes vacant. Brother Warder of the West, declare the will of the brethren."

The Senior Warder rose.

"Most Worshipful Sir," he said, "the brethren are in universal accord with your decree. They desire enlightenment, however, on one point. You stated that Troyana should be the home of Brother Nankivell forevermore. Is your permission for him to leave revoked?"

"It is revoked," replied the Master. "Never again will the opportunity be given to him to leave the city. I also decree that if permission ever be given to another to leave, that first his mind shall be so treated that all memory of Troyana shall be erased therefrom. Now it is my further decree that Brother Nankivell's longevity be increased to that commensurate with the crimson degree which he holds. Brother Nankivell, will you solemnly undertake to throw in your lot with Troyana, abjuring any other allegiance you have ever held?"

"Gladly, Most Worshipful Sir," replied Nankivell cheerfully. "Since the things I care most for are here, I have no desire to leave."

"Are the brethren now satisfied?" demanded Zephaniah.

"They are, Most Worshipful Sir," replied the Senior Warder.

"Then it is so ordered. Let the decree be entered." Nahum rose to his feet.

"Most Worshipful Sir and Brethren of the Blue Degree," he said, "time was when my heart was sore against the newly returned brother. When he came among us, I welcomed him and grew to love him as a son. I made him a member of my family and encouraged his intimacy with my granddaughter, the only scion of my house. I failed to foresee the consequences.

"They were thrown together and their hearts realized that they were made for one another. In my sin and folly, I set my feeble wisdom above that of the Great Architect who had guided their hearts, and I forbade their union. It was at my suggestion and at my insistence that Brother Nankivell and his companions left Troyana.

"Too late, I realized what I had done. When Estha was missed, I thought that a black-hearted villain had stolen her away. How far wrong I was, you have seen today. I have learned the futility of striving to keep asunder those whose hearts tell them to join. Once before, Brother Nankivell, asked me for the hand of my granddaughter. I refused him. Brother Nankivell, do you still make this request?"

Nankivell sprang to his feet, with shining eyes and pounding heart.

"It is the great wish of my heart, Brother Nahum!" he cried.

"Then your prayer, if the Master will approve, shall be granted. Alone you invaded Amos' camp and bore her away to safety. No one has, or ever can have, a greater right to her. I have long loved you as a son, and a son in fact you shall be, if your prayer is granted. Make now your petition to the Most Worshipful Master, whose word is law."

With shining eyes, Nankivell faced the oriental throne. Zephaniah bowed his head to hide the frown which played over his face. Nankivell waited anxiously. At last the Master raised his head.

"In all the ages during which Troyana has existed," he said slowly, "never once has a daughter of the blue mated with an outlander. Thus have we kept our blood pure and our race undefiled. Now it seems that Troyana may fall and her glory be no more. If such be the case, it is my will that she fall with her proud blood undiluted and her ancient landmarks intact.

"Brother Nankivell, you have done much. You have disobeyed the orders of the Master and escaped punishment. Strive not to force the limits of my mercy. For the present, the prayer you have made is refused. Once the rebels are defeated and the rule of the Master once more holds undisputed sway, you may again prefer your request and I promise it shall be considered. What my decision then will be, I cannot tell. For the present, may the Great Architect bless you and make you a true and loyal brother, and may he speed the day when you may again present your petition to my throne. Nay, Brother Nahum, say no more. My decision is made. Let the decree be entered."

"So mote it be!" came a murmur from the Council.

## CHAPTER XI

### The Last Hope

"I DECLARE this council duly constituted," announced Zephaniah. "Brother Scribe, declare the number of the brethren."

"Of the purple, one present and, we hope, one imprisoned in the Vault. Of the crimson, nine. Of the blue, one hundred, eighty and two. Of the yellow, five hundred, ninety and four. Of the black, none."

Zephaniah looked sadly at the depleted group gathered in the assembly hall. The twenty-seven months which had passed since Nankivell's dramatic return to the sanctuary had not been a propitious one for the beleaguered nobles. To be sure, Amos had made no headway against them, but on the other hand, they had not reconquered one foot of the ground they had lost at the first onset of the rebellion. Their scanty numbers had dwindled in the almost constant warfare which had gone on between them and their former slaves.

The Master himself showed the strain of the years badly. No longer did his body have the vigor of old and his steps were slow and uncertain. Only his eyes shone with their former brilliance and his face showed its old lines of determination. Worn out his body may have been, but there was no surrender written in his lined countenance. He heaved a sigh as he turned toward the officer seated on the left side of the hall.

"Brother Warder of the South, your report," he said.

Nahum rose in his place.

"My report is ill, Most Worshipful Sir," he said.

"The last battle when we had to arm our heaviest projectors used all of the reserve power units we had been husbanding for such an emergency. We have now but enough power to maintain living conditions in the sanctuary for another half year, with one hour of using the projectors. Half of our flashtubes are exhausted. If we recharge them, there will be only enough power units left to arm the projectors for twenty minutes.

"Our consumption of power has been greater than we anticipated. Three months ago, we thought we had enough to insure our safety for another year, but half of our scanty supply was used on the night when Brother

er Nankivell, with the authority of the Master and the Council, powered a sending instrument for an entire night endeavoring to summon Brothers Mariston, Duncan and Willis to our aid with a load of energy units. Even though that message failed to reach its destination, I do not regret its use. It was our only chance.

"Since our message failed to reach them, there is no further hope that I can see. The state of our stores is as I have set out."

"This, then, is the end," said the Master sadly. "Amos had a larger supply of power than we thought, or else he has found a new supply. One more determined attack and the doom of Troyana is sounded. This will be the last gathering of the Council, for I can see no reason for again assembling. You know the worst. All that is left for us is to show the lower degrees how the nobles of Troyana can die. Knows any brother reason why I should not declare this Council dissolved forevermore?"

Nankivell rose to his feet.

"Most Worshipful Sir," he said. "Before you take this action, I have a petition to present."

Clouds gathered on Zephaniah's face.

"Brother Nankivell," he said sternly, "your petition has been presented to me three times in the last two years, despite the fact that I gave you leave to present it only when my rule was again firm. The reason I gave when I first refused it, is stronger now than it was then. Then, I merely feared that Troyana might fall. Now her fall is a certainty. Your petition is refused. Has any other brother aught to say before I close this Council for the last time in earth?"

An aged brother rose to his feet. In that whole assembly, only his robes were of purple. It was Jereboam, the lone representative of the Keepers of the Sacred Treasure, the highest degree to which a noble of Troyana could aspire. Of the three, Mordecai had died in the first great fight when the Bearers of Burdens had revolted, and Zerubbabel had been imprisoned in the Vault he guarded ever since that fateful day. What was his fate, no one knew, for power was too scarce to spare any to communicate with him through the miles of living rock which he had lowered to keep Amos from reaching the vast stores of energy he guarded. When Jereboam rose, the Master also rose to his feet as a token of respect, for although the Keepers of the Sacred Treasure had no voice in the government of the city, other than a simple vote, their immense knowledge entitled them to the utmost respect.

"Most Worshipful Sir," said the Keeper, "have you definitely given up all hope and is Troyana doomed?"

"I have no hope left, Jereboam, and I can see no other fate in store for our beloved city than destruction."

"Then the last great extremity has been reached and the light is about to merge into the great darkness for all time?"

"Until another arises who will restore the light and the word and raise again the banner of the true faith."

"Then is the time come for me to speak. For ages, men have wondered what is the sacred treasure which we three of the purple guard. The brethren of the blue degree know that from the Vault came the energy which enabled Troyana to exist. The brethren of the crimson degree know what the energy was. This much was known, but the rest of the secrets of the purple degree were known to only three men, of whom I am, I fear,

the last. Our oath bound us to secrecy until such time as the Master should announce in open Council that the last great extremity had been reached and that the light was about to merge with the great darkness for all time to come. This has now been announced and the secrets of the purple degree are about to be disclosed for all to hear.

"Not only did we guard the stores of energy and extract it from the rocks and put it in such form that it could be used in the Crypt, but we are also the custodians of a great secret. For ages our Atlantean slaves have had a tradition that their last ruler never died, but is sleeping. One day, they said, he would awake and come to their aid. This has been laughed at by the nobles of Troyana, but we of the purple know that it is not an empty tradition, but one which rests on solid fact.

"When Atlantis sank, it sank slowly and the inhabitants had plenty of warning. The sinking was prolonged over a period of nearly forty years. When it finally sank below the waves, some few of the lower classes took refuge with us and became the ancestors of our present race of Burden Bearers. It is worthy of note that not one of their ruling class took refuge with us. Yet we know that the civilization and science of Atlantis was nearly equal to ours. In fact, it surpassed ours in some ways. What became of the rulers of lost Atlantis was never known in Troyana. This is what I am about to tell you.

"The Atlantean scientists had learned the secret of suspended animation. Enclosed in crystal cylinders, they had found that they could exist indefinitely and yet be roused again by the proper means. The King of Atlantis, together with all of his court, sailed west from their land past ours until they came to a vast continent. There, in huge caverns hollowed under the ground, they erected their cylinders and took refuge in them. There they are to this day in a state of suspended animation.

"Five hundred years later, our land sank, and we followed them to the west. The same reasons which impelled them in their selection of a refuge, guided us. We set up our new empire of Troyana on the same ground as they chose. Miles underground, beneath the spot where our city stands, is the court of Atlantis, awaiting the day when they shall be wakened into life."

"Why—I saw them!" cried Nankivell.

"Yes, Brother Nankivell, you did. When you returned to the sanctuary and I learned this, I marveled. Others have suspected and have gone in the past to seek, but they fell victims to the *Underground Dwellers*, the giant toads which the Atlanteans developed to guard their resting place, even as we developed the *Guardians of the Jungle* to guard our marches. You won through and brought back the word. The secrets of the purple degree were not yet to be revealed to all. Fortunately, I learned of your adventures before you told them to any, even to Estha.

"THE day of your trial, the Master ordered that you be given increased longevity to fit in with the rank you held. I was the one who was directed to perform the task. During it, I read your mind and found in it the memory of your discovery and your flight. In order to prevent it from being known, I submerged that portion of your memory so that it would never recur unless I called it back, as I have done now. That is why you never told the story. But you have seen, and

if it be heedful, you can bear witness to the truth of that which I have said.

"Most Worshipful Sir, I have fulfilled the last of the tenets of my purple obligation. The Council knows the secret which has been guarded from the world for ages and which was to be revealed only when all other hope was lost."

"Yet of what value is this secret to us, Keeper of the Sacred Treasure?" asked Zephaniah.

"Had it not been of value, our fathers would not have shielded it from common knowledge as they did, nor would they have ordered it to be revealed publicly in the last extremity of the city. What its value is, I know not, but value it must have. Possibly the sleepers have with them energy units, or know where a store can be found, other than the Vault. I would advise that an expedition go to their resting place and search. If no energy units can be found, then I would advise that the sleepers be awakened and questioned."

There was silence for a moment when he had finished.

"We are indeed in dire need," said Zephaniah, "and I dare overlook nothing which offers a chance of our salvation. Tomorrow an expedition will start under the guidance of Brother Jereboam to seek out the resting place of the court of Atlantis and the search for energy. If none can be found, you will have my authority to awaken the sleepers and question them. If they aid you, offer them in my name a haven of safety in our midst until such time as they can find themselves a suitable dwelling place far from our halls.

"Five of the crimson degree, including Brother Nankivell who has been there before, fifteen of the blue and one hundred Craftsmen will go. Brother Nahum will command. Let the decree be recorded. Pending the return of this expedition and its report, this Council will not be permanently dissolved."

WHEN the meeting had closed, Nankivell and Nahum walked to the set of rooms assigned to the Junior Warder, rooms where Nankivell was a permanent guest. Conveyers were a thing of the past in Troyana. No energy was spent where its use could be avoided. As they entered the rooms, two girls rose from divans upon which they had been reclining.

"What word, Frank?" asked Estha anxiously.

"The Master refused us again, Estha, but I don't think it matters so much. Amos will probably rest for at least a couple of weeks before he attacks again. Before that time, I am sure that Mariston and the rest will be with us."

The second girl came forward. Like Estha, her dark beauty was striking, but she lacked the imperious expression of command which marked her cousin.

"Do you think they are really coming, Frank?" she asked.

"I do, Balkis. I am certain of it."

"But it has been so long."

"It took us longer than three months to get here the first time we tried, Balkis. They'll hurry all they can this time, but any little thing, even a grounded steamer on the Amazon or the Tapajos, would delay them. Then, too, they may have had some trouble in getting paddlers. We had a lot of trouble the first time. If they couldn't get any and had to come alone, it might easily be another two weeks before they get here."

"They may never have got your message."

"That's possible, but I know George Duncan. He had plenty of money from those diamonds we took away and he is sure to have been experimenting with a short wave receiver. He planned to make one along the lines of our observers. I sent the message just two years to the day after I left him in the jungle. On such an anniversary, he was sure to be thinking of me. I'll bet a ten-dollar bill against a plugged nickel that he got it."

"They may not have come, even if they did get the message," protested the girl.

"Balkis, I know Bob Mariston and I know George Duncan. Also I have a speaking acquaintance with Ray Willis. Wild horses couldn't hold those men back once they received the message. They're on the way right now."

"Why, Balkis!" cried Estha reprovingly, a twinkle in her eyes. "Do you mean to tell me that you were in peril, he'd fly across the world to your rescue?"

"He would not!" cried Balkis, a blush mounting to her cheek. "I don't think for a minute he would. What I meant was that he might not come to rescue the city. Perhaps they are all settled down and won't feel like giving up everything and risking their lives for people who virtually turned them out when they were here. They may be married for all we know."

"You mean, of course, that maybe their wives won't let them come," laughed Nankivell. "That may be the case, but I don't believe it. Probably George Duncan is married, he was pretty set that way. If he is, he may not come, but Bob and Ray will be plenty. Even one of them would be enough. I'll bet anything that Ray Willis isn't married. If he got the word, he's on his way right now, but he is the least likely one to have received the word. He's as likely to be in Timbuctoo or Spitzbergen as on his way here. The one on whom I pin my real faith is Bob Mariston. He has a reason for coming here besides pulling a scapegrace friend out of a hole."

The blush deepened on Balkis' cheek.

"I'm afraid you're mistaken, Frank," she said.

"Not by a long shot, young lady," he laughed. "Old Bob was pretty hard hit here in Troyana by a certain young lady. Even before I left him, he was regretting that he had left. He'd have given anything to have been back. In fact, I nearly woke him up and brought him along. If you had been in danger instead of Estha, he'd have been here hot-foot. As soon as he learns that the road is open, he'll break all records getting here."

"Oh, I hope he comes," murmured Balkis in an undertone.

"If Zephaniah takes the same narrow-minded attitude with you and Bob that he has taken with Frank and me, Bob's return won't do you much good," remarked Estha. Balkis looked down in confusion.

"Oh, I didn't mean that!" she protested. "I was thinking of the city."

"It's exactly what you did mean, young lady, and the fate of Troyana was far from your thoughts," retorted Estha. "I'm not as dumb as you seem to think. I know why you've been moping for the last two years. Cheer up, dear," she went on, putting her arms around Balkis, "he'll be here in a few days and then we'll smash Amos. When we do that, Zephaniah will have to let you marry him and we'll all be happy. We'll make it a double wedding."

"That program suits me fine," laughed Nankivell. "Now I've got some news for you which I've been putting off. Nahum and I are leaving on an expedition in the morning."

"An expedition?" cried Estha, her face blanching.

"Yes, but we'll come back safely. Don't worry, dear. This isn't the attack on Amos' camp that I've been advocating for the past two years. We haven't enough power left to make that now with any chance of success. This is to the labyrinth under the lower city."

"Frank! How will you get through Amos' camp?"

"Jereboam knows a path. Over a hundred of us are going and there'll be no danger, not half as much as there is here every time Amos attacks. Now I'm going to tell you about a part of my adventures returning here that you have never heard before, thanks to Jereboam. He read my memory and doctored it before I had a chance to tell you or anyone else. I just recalled it this evening. It's the gap I could never account for between the time that I entered the city the first time and the time I attacked with Gedaliah."

## CHAPTER XII

### The Underground Dwellers

AT dawn a group of men assembled in the courtyard before the assembly hall. They were the band whom Jereboam was to lead into the bowels of the earth as the last forlorn hope of the beleaguered city. Gone were the gorgeous robes which made brilliant splashes of color in the assembly hall, making the Council a scene of barbaric splendor. Each of the men was attired in sombre black with only a narrow band of color, invisible at ten paces, marking their exalted rank. The black robes were an idea of Nankivell's, who suggested that if they were seen at a distance by Amos' followers, they would be mistaken for Burden Bearers. Each of them carried a sword and a dagger hanging from his belt, while from loops over his shoulders hung five of the deadly flashtubes which were the only hand weapons, aside from swords, which the genius of Troyana had developed. Nankivell, in addition to the weapons carried by the rest of the band, wore an automatic pistol strapped to his belt. His rifle he carried in his hand. The remaining pistol he had left with Estha for her protection if the last attack of Amos should come while he was far from the sanctuary.

"There probably isn't much use in lugging these things along," he confided to Nahum who was in command of the party. "I have only nineteen loads left for my rifle and twelve pistol cartridges. Thirty-one rounds aren't much good, but back here they would be of even less value."

"It is well to take them," replied Nahum. "I would that we had a hundred, or even a dozen rifles, but through the ages the sciences of Troyana have been devoted to the arts of peace and not of war. The flashtube was an accidental development. We have other defensive weapons, but they are too large to carry with us. However, I hope there will be no fighting."

"So do I. I have had enough to last me the rest of my life, but it is always well to be prepared. Where is the entrance to the underground region?"

"Behind the altar where you and your friends left the city, I fancy. It is the only shaft I know of that has

stairs and there isn't an elevator in the city which is powered."

"I expect you're right, Nahum. Here comes Jereboam now."

The lone representative of Troyana's highest degree emerged from the assembly hall, Zephaniah at his side. The Master raised his hands toward the east. The assemblage sank to their knees.

"Vouchsafe thine aid, Great Architect of the Universe," prayed the Master, "to this, our present undertaking, and grant that these men may go in peace and return in harmony. Grant, if it be they will, that their mission be crowned with success and that the rightful rule of those who hold thy holy name in veneration be reestablished. May the right triumph and every virtue prevail."

"So mote it be!" was the answer from the kneeling men.

At a command from Nahum they formed themselves into a column of threes, Nahum, Jereboam, and Nankivell, who had been designated as Nahum's successor should any ill befall the Junior Warder, in the lead. To the surprise of those of the crimson degree who knew the secret of the pit beneath the altar, Jereboam led the way toward the other end of the sanctuary. The column came to a halt before a blank wall. The men wracked their brains, but not one of them, aside from their guide, had ever heard of the existence of a passage way in that section of the city.

Jereboam faced the wall and slowly recited a phrase in a long-dead tongue, one so ancient that he alone of those present understood it. There was no result.

"Are you sure that power has been applied to this section, Most Worshipful Sir?" he asked.

The Master nodded in assent. Again the Keeper of the Sacred Treasure faced the wall. In a slightly altered key, he once more recited the phrase. A sigh went up from the column as a crack appeared in the face of the wall. It widened until a man could pass through it.

"That will do," said Jereboam.

Zephaniah gave a curt order and the crack ceased to widen.

"We have too little power to waste any," he said in explanation to Nahum. "Your men can pass through that gap and reform on the other side. It takes much power to move these heavy masses of stone."

Nahum and Nankivell wrung the Master's hand silently and followed Jereboam through the gap. The block of stone which had moved to one side to admit them proved to be a full thirty feet in thickness. Once past it, they emerged into a large room, lighted by radium bulbs. The bulbs were glowing dimly as though they had been there for countless years without replacement. The cavern in which they found themselves was large enough to allow the column to reform. Nankivell was puzzled at its dimensions until he realized that it must be hollowed out of the supposedly solid rock against which one side of the sanctuary was built.

"Follow behind me," said Jereboam, "and make no noise. Where we pass the level of the lower city the walls are thick, but stone carries sound well. It is best that Amos does not suspect that any have left the sanctuary."

Their sandalled feet made no noise on the soft composition with which the tunnel, like all of the floors of Troyana, was covered. Like a procession of ghosts the



column wended its way after the dimly seen form of its guide.

Presently he held up his hand in warning. He had paused at the top of a flight of stairs, the second flight which Nankivell had seen in Troyana. They were wide enough for five men to walk abreast and they led away into the depths of the earth, farther than the eye could penetrate. Jereboam led the way downward.

As he had done once before, Nankivell kept count of the number of steps. He counted to five hundred before they ceased. He gave a sigh of relief as his tortured muscles relaxed on level ground, but his relief was short-lived. The road led along a level stretch for a few hundred yards and then the interminable descent began again.

Nankivell lost count of the steps. Six times the column halted for rest on a level stretch before the descent was renewed. Allowing ten inches to a step, Nankivell figured that they must be half a mile underground when the bottom of the last flight had been reached. He knew that the lowest stretches of the lower city were not over a thousand feet underground, so the need for silence had passed. No noise could travel through the two thousand or more feet of rock which must lie between them and the camp of Amos.

The lights had been spaced at greater intervals as they went deeper into the earth until at the top of the last flight of steps, they ceased entirely. Despite the absence of bulbs, it was possible to see dimly, although the source of light was not apparent. It seemed to emanate from the air in which they stood, for the walls did not glow and the strange illumination cast no shadows. The men of the column had insensibly drawn closer together.

AFTER a short rest Jereboam turned to the right and led the way forward. The path sloped downward. In the course of half a mile a distinct feeling of dampness became noticeable in the air. Nankivell touched the walls and found drops of water adhering to them. He suddenly started. Dim, and so faint that he could hardly be certain of it, he caught a faint whiff of a strange reptilian odor. Memory woke in a flash. It was the same musky odor which had heralded the appearance of the huge toads on his previous trip into those regions.

He turned to Jereboam, but their guide had caught the odor as soon as he had and had correctly interpreted it.

"Lights!" he called.

In a moment a string of hand torches shot rays of brilliance through the gloom. The lights revealed that they were in a dank tunnel, fifteen feet wide and scarcely eight feet high.

"Ahead are the *Underground Dwellers* who guard the sleepers," said Jereboam. "I have never seen them, but I have heard of them and know the danger. I believe they are too large to penetrate this tunnel, but when it opens out they may attack. If so, use your tubes, but sparingly, and but one tube to a *Dweller*."

The path grew level and opened out into more spacious dimensions. Nankivell had noticed no branching or intersecting tunnels before, but now they became common. Light in hand, Jereboam would examine the corners of the wall each time there was a choice of roads and unhesitatingly chose one. Presently he called all of the members of the cryptic degree to him.

"Mark well these signs graven in the rocks," he said pointing. "At first glance, all appear to be the same, but there is small difference in them. On that difference may hang life and death for all of us. Mark them well so that if I fall, one of you can guide the column back to the sanctuary."

A few minutes of careful study showed them the minute differences in graven symbols which pointed out their path.

"Lights out!" cried Jereboam.

As the lights faded out, it was seen that the dim glow which had at first lighted the caverns had disappeared. The darkness was intense. It was evident to all that the musky reptilian odor had grown stronger.

"Lights on!" cried their guide. "Let half of those in the rear four ranks use lights while the balance hold flashtubes in readiness. Let the front four ranks do likewise. Let alternate men along the middle keep lights on and play them down any intersecting corridors."

Bunched closer together and with their lights playing as Jereboam had directed, the column made its way slowly forward. The musky odor became almost overpowering. Nankivell thought that he could hear a slight scuffling sound from around the corner of an intersecting passage which lay just ahead of them.

"Look out for trouble!" he cried.

His warning came too late. The head of the column had reached the open end of the intersecting corridor. As it did so, there was a scream from a Craftsman in the second rank. Nankivell whirled, pistol in hand. He had a momentary glimpse of a huge bloated face and long talons holding the body of the hapless Craftsman. He raised and fired twice. A hissing sound came from up the corridor and then a reek of stench which nearly suffocated him. Nahum raised a flashtube but Jereboam struck it up.

"The *Dweller* has passed beyond range," he said. "Do not waste any of our scanty weapons. There will be plenty of opportunities to use all of them before we see the light of day again. Keep your lights playing and send them around corners as the head of the column passes. Use your tubes as you get an opportunity, but only when you are sure they will be effective. Once a *Dweller* has seized a brother, there is no rescue. The stench you smell is the poison with which the *Dweller* smothers its victim as soon as it has grasped him. The shriek you heard was Obadiah's last."

The column resumed its forward march. They passed the corridor safely, but they were hardly past when a shriek rose from the rear. Mingled with it was the crash of a flashtube. The whole tunnel was bathed momentarily in a flood of brilliant light. In the momentary flash, Nankivell saw a dim bulk ahead of them, just out of range of their lights.

"One of the *Dwellers* is slain," came a report from the rear of the column.

"And here's where another gets his," said Nankivell grimly.

He unslung his rifle and dropped to one knee. Carefully he lined his weapon up with the sides of the cavern and squeezed the trigger. In the restricted tunnel, the shot seemed loud enough to burst his eardrums. It rattled and reverberated along the cavern. Mingled with it came a hissing like escaping steam. The odor of corruption came down in almost a visible wave.

"I don't think that fellow is feeling any too good,"

said Nankivell as he reloaded his rifle with deft fingers.

Two hundred yards further the head of the column came to a damp place on the floor. Nankivell stooped down and examined the dampness with his light. It was a thick white viscid liquid. The stench from it was terrible.

"Your shot was true," commented Jereboam, "but it is better that you save your weapon. The need for it may be great for its range is much greater than that of the tubes."

Nankivell assented. He slung the rifle again on his back and unhooked a flashtube from his belt as the column proceeded on its way.

For half a mile no further interruption came. They passed a point where four passages branched out from the one they were in. The lights of the invaders stabbed paths through the darkness up all of them in turn. Dim forms could be seen just at the limit of the beams, too far away to be reached by the flashtubes. Every way was blocked.

Jereboam advanced under cover of a dozen lights and examined the markings cut in the rock. He indicated the right hand tunnel as the one they were to follow. Calling ten men to his side, Nankivell advanced up the indicated corridor.

"Turn all your lights down the other paths," he said to those left behind. As they obeyed, he gave a crisp order to his men. Their lights winked out. In the darkness a scuffling sound could be heard approaching. A reeking wave of stench almost overcame them. Nankivell suddenly turned on his light. Just in front of them, blinking at the light, their white tongues licking in and out, squatted two of the huge toads.

"Fire!" cried Nankivell.

There was a blinding flash and a crash as of thunder as two of the flashtubes unloosed their imprisoned charges of static electricity. Nothing could withstand their tearing force at short range. As their lights flashed on, the shattered forms of two of the *Underground Dwellers* lay to one side.

"Come on, that way's clear," called Nankivell.

THE column advanced toward him. Hardly had its end cleared the intersection than there came a scream from it. When the lights had disappeared, the toads had charged down the other passages. Flashtubes crashed, but their Wielders were confused by the attack. Tubes were wasted on dead monsters and others were discharged with faulty aim. When a report was received from the rear, it was found that the *Underground Dwellers* had taken a toll of three of the marchers.

With heavy hearts they moved forward. Nankivell found time to marvel at the good fortune which had enabled him to fight his way alone through the dangers which had surrounded him.

The path ran along on a dead level between damp walls and under a dripping roof. At every intersection, the *Dwellers* awaited them. Tube after tube was fired, not always in time, for the sudden rush of the great toads frequently bore off a man even in the face of the lights and the hostile fire. The *Dwellers* were getting bolder and more numerous, or else they were getting more accustomed to the glare of the lights and the crash of the flashtubes.

Presently a call for more tubes went up from the rear of the column. Nahum stopped and ordered a count of

the tubes made. Of the three hundred and sixty-three tubes with which they had started, seventy-nine had been discharged.

"Guard your remaining tubes carefully," he cautioned. "Remember, we must fight our way back through this place."

Presently the road made an upturn. Jereboam gave a cry of thankfulness, which was reechoed along the column as he reported it. As they advanced toward higher ground the path became drier underfoot and the *Dwellers* less numerous. A dim light pervaded the air, visible even in the glow of the lights of the column.

"Lights out!" cried Jereboam.

The lights died out along the column. As they did so, there was a shuffling sound. A scream rose from the rear and a flashtube crashed. Without command the lights went on again, and just in time. Desperate at the prospective escape of their prey, the *Underground Dwellers* had attacked in force. The tunnel in which they now were was a hundred feet across. Fully a dozen of the hideous travesties of nature had bounded up with great leaps. Their misshapen tongues licked in and out as the lights shone on their huge eyes, a foot in diameter.

Despite the lights, they came on in great leaps. Flashtubes roared and one after another of the monsters were hurled aside, a battered mass of quivering flesh. The slaughter was not accomplished without loss. The leaders of the column, who could only helplessly watch their comrades battle for their lives, saw three of their men, their flashtubes exhausted, caught in the cruel talons of the *Dwellers*. Before a flashtube could end the life of their captors, a huge tongue would lick out and cover the luckless men with a heavy slime. Instantly their struggles would cease.

The last of the toads was hurled aside by a well-directed charge of static electricity and the leaders of the column turned their eyes to the front. They had done so just in time. Others of the *Dwellers* had taken advantage of the lack of lights playing in their direction to close in. Five of them came forward with a rush.

Well-directed discharges from flashtubes disposed of three of them before they could reach the column. The other two closed in, but as they did so, Nankivell's pistol barked. His shots were well aimed and made the creatures pause. Before they could resume their advance, flashtubes crashed and the way was clear before them.

"I was a fool to even momentarily order off the lights," said Jereboam bitterly, "and the lives of three of my countrymen have paid for my folly. They will stay on now until all danger is past."

The road continued on its upward grade and became lighter. Nankivell experimentally turned off his light. The air glowed with a peculiar brilliance.

"I think the lights could go off now," he suggested.

"So do I, but I thought so before," replied Jereboam. "They will stay on until we passed a restricted area in the tunnel."

The corridor began to narrow. It grew smaller until it was less than eight feet high and wide enough for only two men to walk abreast. It was evident that one of the huge *Underground Dwellers* could not force its bulk through the passage. It had grown light enough now that the lights of the column barely showed on the floor ten feet ahead of them. After a quarter of a mile the tunnel widened until it was thirty feet across.

"Lights out!" cried Jereboam.

When the lights died out, the uselessness of keeping them burning longer was evident. The passageway was lighted well enough for them to see a hundred yards ahead without difficulty. Nankivell looked around for the source of light, but could find none. The strange light cast no shadows and seemed to emanate from the air itself. He turned to Nahum to question him but the question died unuttered on his lips. The corridor made a sudden bend and opened out into the huge vaulted cavern he had seen once before. Before them in long rows of crystal cylinders lay the sleepers, the long lost court of sunken Atlantis.

## CHAPTER XIII

### The Sleepers Wake

A CRY of astonishment went up from the nobles of Troyana at the sight before them. In a huge vaulted chamber, a thousand feet long and three hundred feet wide, stood row after row of crystal cylinders, in each of which was a body. Men, women, and children there were, all attired in gem-encrusted leather harness with cloaks of brilliant colors dependent from a collar and thrown loosely over one shoulder. Each body was supported in position by three braces of silvery metal running from bands which encircled the inside of each cylinder. The feet of the bodies were half hidden in a thick layer of a white crystalline substance resembling coarse salt. Inside the cylinders were three indicator dials, the needles of each of which registered near the center of the scale. On the top of each cylinder was a knob of silvery metal, evidently of the same material as that of which the braces and bands were fashioned.

They were ranged in long orderly rows down the length of the cavern. As the marching column moved up the length of the hall, gazing with silent wonder at the sight, they saw that the dress of the figures became gradually more brilliant and more heavily encrusted with gems as they neared the far end of the huge hall. The climax came at the extreme end where eleven of the cylinders were arranged on a slightly elevated platform. The harness of these figures was so heavily encrusted with gems that no leather could be seen.

Jereboam bowed low before the central figure of the eleven, a man well over six feet in height and massively built. His cloak was purple, the same purple as Jereboam wore on state occasions. His head was crowned with a gem-encrusted circlet of gold in the center of which blazed an enormous cut diamond.

"Behold here the last ruler of lost Atlantis," said Jereboam solemnly. "In his day he ruled with autocratic power the largest civilized empire of the world. He had wisdom, too, such wisdom as but few have inherited, but despite this he ruled not wisely. He ruled with caprice and cruelty and his court became a stench in the nostrils of the Great Architect. On his people was the wrath of heaven loosed and the all-devouring waters covered his lands. He, himself, managed to cheat death for a time and came here. Yet in the end, it will avail him nothing, for all must die and each must finally answer for the use he has made of his life.

"Unless we aid him, in time the substance on which he relied to prolong his life will be exhausted and his dead body will crumble into dust in the cylinder in which

it is sealed. Then all that will be left of the glory that was Atlantis will be a few useless gems and a little gold, mixed with a handful of mouldering dust.

"But we came not here to learn a lesson, although it is one on which we might profitably ponder. Here are we safe from attack by the *Dwellers* and it may be that here is a store of energy units hidden. Scatter ye, and search!"

The band broke up and scattered through the cavern. Systematically they went over every inch of the vast space, even tapping every foot of the floor and walls, seeking for the hollow sound that would reveal a secret hiding place. Presently a cry came from one corner of the room. Jereboam had found that which they sought. It was a massive chest set partly in the floor of the cavern. A few minutes of feverish work enabled the nobles to open the lock and throw back the massive lid. Inside was not the cobalt they sought, but pile after pile of thin plates of beaten gold, covered with fine engraving. Jereboam raised one of them to the light and examined it.

"It is in the written language of Atlantis!" he cried. "Only one other specimen of it exists to my knowledge, a plate kept in the vault. Fortunately we of the purple degree have been taught to read it. I will translate this."

He bent over the plate and read it slowly and with difficulty.

"It is but an account of the history of Atlantis from the earliest dawn of time until the land sunk beneath the waves," he said in a disappointed voice. "Perhaps, however, the latter pages may tell you what we seek."

He removed the plates from the chest until he reached the end of the long history. He studied the lower plates.

"Nothing is told of any treasure stored away save the gems which were placed on the harness in which they are attired," he said. "There is, however, a reference to the 'stores and weapons' stored with them. Undoubtedly that is what we are seeking, but this gives no clue to where they are hidden. Since we know that they are here somewhere, seek again and strive to find them. If all else fails, the second thing for which I sought is here. This plate gives detailed instructions for waking the sleepers. If all else fails, I will arouse one of them and question him. I hope I do not have to for the nobles of ancient Atlantis were a cruel and treacherous race."

Again the men from Troyana scattered throughout the mighty hall, searching for any signs of a hiding place. Two hours of searching revealed nothing. At a word from Nahum, the entire band gathered before the dais on which stood the cylinders housing the king and the royal family.

"I must awaken one of the sleepers," said Jereboam. "The king is sure to know where stores and weapons are hidden, so him will I awaken. All but two who shall assist me must stand away."

Nahum and Nankivell stepped forward. Jereboam pointed out to them faint shadows in the cylinder about a foot from the top.

"Those are threads by which the top is screwed to the body," he said, referring to the golden plate he held in his hand. "We cannot unscrew the tops for they are held in place by a force, the nature of which is not stated. The force, however, is centered in these knobs on top of the cylinders. Feel them."

"They are cold," said Nankivell. "I remember that."

"Yes, cold indeed. We will apply heat to them and thus unseal the caps. It is the only way to enter, for the cylinders themselves are composed of material of a toughness and hardness unknown to anything else on the earth."

"A pistol bullet wouldn't scratch them," said Nankivell reminiscently.

"It is well that it didn't for alone and ignorant of their language, your reception might have been an unpleasant one had you succeeded in rousing them," said the venerable Keeper of the Sacred Treasure. "Now when we rouse them, we are in sufficient force to insist on a cordial greeting."

He took a flashtube from his girdle and made an adjustment to the lever which released the static charge. He pressed it and from the end of the tube came a long pencil of intolerably brilliant light. He directed the beam on the metal knob which projected from the top of the cylinder enclosing the king.

The knob began to glow fiercely. Jereboam held the beam on it without wavering until the glow died down and the knob became a dull red. Nankivell gave a cry of surprise. The braces and bands inside the cylinder were now giving out an intense light of their own. The red faded from the knob and it grew dull and lifeless. Jereboam shut off the rapidly emptying flashtube and struck the knob a sharp blow with the sword he drew from its scabbard. The knob crumbled to dust under the blow.

"The cap can now be unscrewed," said Jereboam.

Nankivell stepped forward and grasped the cap while Nahum held the cylinder. To his surprise, the cap turned readily. He unscrewed it and dropped it to the floor. It rang like a bell as it struck the stone floor.

TWO men stepped forward and aided him to lay the cylinder gently on its side. Nankivell reached in and grasped the Atlantean king by the leather harness and pulled. He expected the leather to be rotted, but the marvelous preservative which had kept the body in a state of suspended animation for countless years had also preserved the leather. Yielding to his efforts, the body of the king slid out of the cylinder, the metal braces and bands still adhering to it. Jereboam stepped forward and unfastened a clasp in the bands. They came away bringing the braces with them.

"Now, but one step remains," he said.

Again he adjusted the weakened flashtube until only a tiny pencil ray came from it. This ray he directed on the prone figure. For an instant he let it play over the brawny chest and then shifted it and let it fall on the base of the king's brain. The figure twitched spasmodically. There was a cry of astonishment from all who beheld the seeming miracle. The Atlantean king opened his eyes and blinked at the light. In another instant he was on his feet.

"Who are ye?" he demanded in Atlantean, looking at the assembled company. His speech, although Atlantean, was such an archaic form that it was with great difficulty that his hearers, all of whom could speak the modern language fluently, could understand his words. Nahum stepped forward to reply.

"We be nobles of Troyana," he said, "who have rescued you from your ages-old sleep to aid us in our need. For your aid, our Master sends his thanks and his greetings and offers you a haven in our halls until you re-

establish your rule among the living instead of ruling an empire of the dead."

Wrath gathered on the face of the monarch.

"Ye dare?" he cried. "Ye dare to waken me from my slumbers before the allotted time has passed in order to aid you in some trivial quarrel? How won ye past the *Dwellers* set to guard us? And why speak ye so strangely?"

"We dare because our need is great, oh King," replied Nahum. "As for our speech, doubtless in the ages which have passed, changes have crept into your tongue."

"The ages?" asked the king, a puzzled expression on his face. "How long have I slept?"

"Over nine and sixty thousand moons have waxed and waned since your cylinder was sealed."

"Nine and sixty thousand!" cried the king in amazement.

He turned to the cylinders which had flanked him and consulted the indicator dials. He made a rapid mental calculation and an expression of awe came over his face.

"Ye speak truth, men of Troyana," he said in a subdued voice. "I can see why your speech is strange to me. For some reason, the device which should have roused us after ten thousand moons failed to operate, and had you not roused me, I would have stayed there until the end of time. Now tell me of what has passed since I composed myself to sleep and what is the danger that threatens your island empire."

"No longer is Troyana an island empire, oh King," replied Nahum. "Many are the changes which have taken place in the world. Listen and I will tell you of them."

For half an hour he talked, telling of the sinking of Troyana and the founding of a new city in the wilderness on the great continent to the west. Then he rapidly sketched the development of the world as it had progressed during the past six thousand years, a progress which Troyana in its carefully guarded isolation, had observed and recorded. Coming at last to modern times, he told of the rebellion of the Atlantean slaves and of the straits to which the nobles of the city had been reduced. As he talked, the king frequently interrupted him with searching questions, particularly as to the government of Troyana and the status of the descendants of those of his subjects who had fled to Troyana when Atlantis sank. When Nahum had finished his tale, the king stood a while in thought, his immobile face betraying none of the thoughts that were racing through his brain.

"And ye seek the aid of the nobles of Atlantis to subdue your rebellious slaves, who are my true and lawful subjects," he said at last. "On what terms do ye seek this aid?"

"On those I named, oh king. Gladly will we offer you a haven in our city until you reestablish your rule in the land of the living."

"It seems that your need is so great that it is I who shall name the terms on which aid shall be given," said the king, a crafty gleam coming momentarily into his eye. "What if I demand that ye admit my force to your city as conquerors, acknowledge my lordship and submit to my rule as the price of my aid?"

"In that case, oh king, we shall send you to a longer sleep than that from which we have aroused you and seek aid among your subjects. Among them are some who will aid us on our terms, especially as their king



will be no more. Would you rather that we do this?"

Nahum raised a flashtube suggestively as he spoke. An expression of rage passed over the king's face, but it rapidly disappeared. When Nahum had finished his speech, the king was smiling.

"Your words are those of wisdom, man of Troyana," he said evenly. "I accept your terms. Name the aid you desire."

"Our need is for energy-units," replied Nahum. "Since there are some here who are not instructed, come nearer while I communicate with you in a low breath."

The king advanced a step and Nahum whispered in his ear. The king stepped back.

"Fortunately, I can aid you," he said, "for a store of the substance you desire is among the material we brought with us. I, however, am ignorant of the exact place where it is stored. I will point out to you six men whom you shall awaken. One of them will be able to direct you to the place where it is."

**N**AHUM looked piercingly at the monarch, but his face was open.

"Name your men," he said.

The king walked along the central line of cylinders and indicated six cylinders. At a word from Nahum, six of the nobles of Troyana stepped forward. They adjusted flashtubes and repeated the actions by which Jereboam had roused the Atlantean monarch. In a few minutes the six Atlantean nobles rose to their feet. They glanced around and then dropped on their knees, their faces touching the floor before their king.

"Rise," he said.

The six rose and waited humbly for his orders. The king spoke rapidly and in an imperious tone. Nahum interrupted him.

"In what language do you speak?" he asked. "My ears are attuned to your language, yet your speech I cannot understand."

"I speak in the secret language of my court," replied the king. "We too have our secrets which cannot be divulged. I crave your indulgence."

"You will issue your commands in a language which I can understand," said Nahum shortly.

"My oath forbids—"

"It does not forbid your instant death unless you comply with my wishes," said Nahum shortly, his fingers playing with the release button of a flashtube.

For a moment thunderclouds gathered on the king's face, but they passed quickly.

"As you wish," he said.

Turning to the six men before him he spoke in Atlantean.

"There is a store of caxoel in the stores which ye guard and of which ye alone know the secret, is there not?" he asked.

"There is, sire."

"Then go, all of you. Open your treasure store and bear here all you can carry. These nobles of Troyana, our deliverers, whom you shall ever reverence, need it. While ye are gone on your errand, they will restore others of our court to wakefulness. Hasten now."

The six bowed deeply and backed away. The king turned to Nahum.

"Will six loads be enough?" he asked. "If not, they can bring a second, or a third load."

"One load will be sufficient," replied Nahum. "As

much as one man can carry will satisfy our wants." "Meanwhile," suggested the king, "you might rouse others of my court who will go with you and battle by your side."

Nahum assented to the programme. A dozen of the men from Troyana adjusted flashtubes and began to restore the sleepers. Jereboam lifted a tube and turned toward the two beautiful women whose cylinders had flanked the king's on the dais.

"Let them be!" said the king sharply.

Jereboam looked at him in astonishment.

"As soon as we have brought you the supplies you wish and you have aroused my warriors, we march against your enemies, do we not?" asked the king.

"We do, oh king."

"Then it is best that my royal family sleep until we return victorious from the battle. Until that time they will be safe here."

"As you wish, oh king," replied Jereboam.

He turned away but Nankivell beckoned to him. When the aged wearer of the purple approached, Nankivell spoke rapidly in English.

"I don't like the look of things, Jereboam," he said.

"I think the king is trying to pull off a fast one. Better get his women out of their tombs so they will be in danger if he starts anything."

Jereboam hesitated.

"I will ask the advice of Nahum," he said.

He advanced toward the Junior Warden to question him but before he could voice the suspicion which Nankivell had raised, there was a dramatic interruption. Through a door in the end of the cavern came two men staggering under the weight of the burdens they bore on their shoulders. They advanced toward the dais. Nankivell watching them closely. When they were within fifty yards of where he stood they stopped and dropped their burdens. Nankivell gave a cry of alarm. Instead of the blocks of cobalt which they had ostensibly been sent to bring, they had deposited on the floor a strange piece of machinery from one end of which projected a tube. They bent over the apparatus, making adjustments. A metallic knob on the top of the device began to glow and from the end of the tube came a beam of pale violet light.

"Look out!" cried Nankivell.

He threw up his rifle but before he could get it to his shoulder the violet ray struck him. As it impinged on his form, all motion ceased and he stood as rigid as stone. The ray swung rapidly around and man after man of the nobles of Troyana was frozen into immobility in the position in which he was when the ray caught him. A cry of wrath and alarm came from those whom the ray had not reached and flashtubes were lifted to blast the traitorous king into nothingness, but there was no target. The king and those of his followers who had been awakened had taken advantage of the confusion wrought by the violet ray to slip away among the cylinders.

Nahum raised a flashtube and pointed it toward the strange machine.

"Cease before I blast you!" he cried.

A mocking laugh was his only answer. The Atlanteans knew as well as did Nahum that his threat was an idle one. The machine had been set down far beyond the range of the Troyana flashtubes.

(Continued on page 1135)

# The Lemurian Documents

By J. Lewis Burtt

## No. 2: The Gorgons

*ALREADY we have received many letters of commendation for the idea of a series of short stories lifted out of the pages of mythology and drawn up into real, virile tales of unusual interest in the field of science fiction. Very little is known about the Easter Islands, but it seems evident to those who are actively concerned with them that these islands are pregnant with interest.*

IT was approaching midsummer of the last year of the thirty-first cycle of Mur when the events related in this manuscript took place.

On this particular afternoon the heat was stifling, even at a height of three thousand feet, as the great Lemurian destroyer hung motionless over the port of Rapani.\* Perseus (or Par-Su, as the Lemurians had it) the commander, lay outstretched on his silken couch. Only nine days had passed since his courage had earned him the rank of "Commander of the Aerial Defences"—one of the youngest commanders in Mur.

Adopted in his youth by Par-Actu\*\*, the emperor's "Chief Adviser in Science and Statecraft," he had already become famed as a soldier and a scientist. Now his first big campaign was ended. Lazily he anticipated a season's leave.

Br-r-r-r-r-r-r! The sharp rattle of the radivisor roused him from his dreams. A flick of the switch, and his father appeared on the screen before him.

"Son, the All Serene, the All Wise, Polydactes (in Lemurian 'Pol-dactu') the Emperor, commands your presence within the private audience chamber. The matter is pressing. Farewell!"

The screen went blank. From the lack of ceremonial greeting, and the immediate disappearance of the image, Perseus realized that this was a matter of which no word must escape. Grumbling to himself, he arose and summoned his attendant.

Sixteen "anars"\*\*\* later he alighted from his private dispatch slier at the golden palace of Polydactes, his tall bronzed form arrayed in the green and silver robes of his rank.

Striding through the royal chambers, he entered the king's presence and prostrated himself.

"No adorations, commander," came the quiet voice of the young monarch. "The matter is urgent. Close the doors; put all ray screens in action; draw down the leaden insulators. No word must be known outside this room."

The emperor seated himself and motioned Perseus to a seat by his side, the royal black and gold robes of Polydactes contrasting vividly with the brilliant green and silver uniform of Perseus—as vividly almost as the auburn curls and fair skin of the king with the straight dark hair and brown skin of his officer.

"Perseus, my friend," continued the emperor, "Your loyalty is about to be put to a test, greater than any you have yet experienced. No!"—as Perseus began to speak—"I know you will not fail me. The princess Ma-Ira of Cho-San, is threatened with war and destruction by the Mingan Emperor unless she consents to marry him, and incidentally unite the two kingdoms, within a season."

Despite the quiet tone of the emperor's words, Perseus knew that his very soul must be racked with torture. Indeed, Perseus himself was almost unable to contain his own fury, for he loved his king as a brother, and well he knew that Polydactes and Ma-Ira only waited

\*Possibly in the district where is now Rapa-Nui or Easter Island.

\*\*The surname "Actu" indicated his blood relationship with the royal dynasty of the time.

\*\*\*The day was divided into 21 "kars," each subdivided into 49 "anars"—following the three and seven reckoning.

for peace to be concluded before uniting their kingdoms by their own marriage.

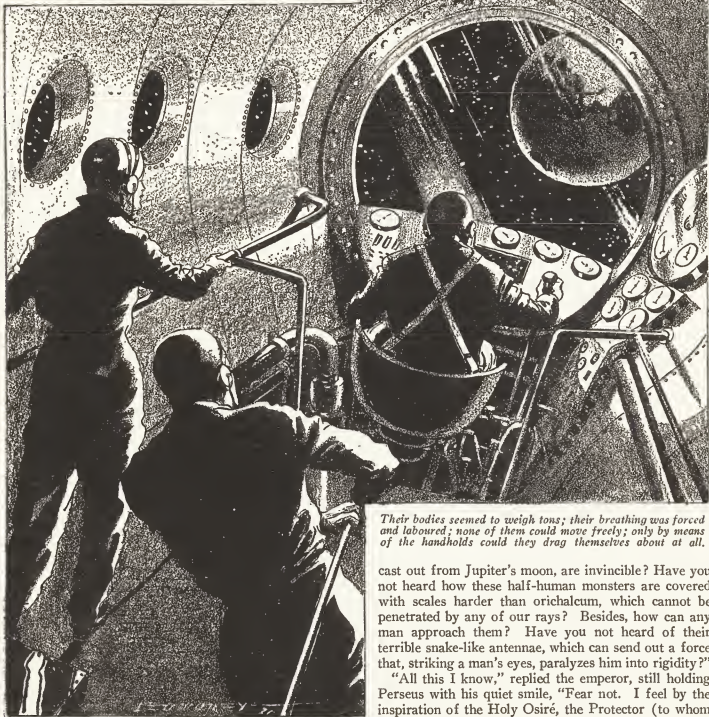
The King continued, "The Gorgons have commanded Mingan to make this demand."

"By the Holy Gods it cannot be!" The words seemed dragged in horror from the young captain's lips. "It *must* not be! It *shall* not! Oh! are the gods themselves dead?"

Quietly the king arose and looked at the stricken officer. "Fear not, Perseus, the gods live. Good can never be killed by evil. It shall not be. I have sworn to my beloved that the Gorgon Medusa and her foul brothers shall die." He paused and took Perseus by the shoulders, "And yours, my friend, the hand that shall do it!"

"Mine!" gasped Perseus, "Am I a magician, a god? Know you not, sire, that these Gorgons, these rebels,

Illustrated by MOREY



*Their bodies seemed to weigh tons; their breathing was forced and laboured; none of them could move freely; only by means of the handholds could they drag themselves about at all.*

cast out from Jupiter's moon, are invincible? Have you not heard how these half-human monsters are covered with scales harder than orichalcum, which cannot be penetrated by any of our rays? Besides, how can any man approach them? Have you not heard of their terrible snake-like antennae, which can send out a force that, striking a man's eyes, paralyzes him into rigidity?"

"All this I know," replied the emperor, still holding Perseus with his quiet smile, "Fear not. I feel by the inspiration of the Holy Osiré, the Protector (to whom

he honour), that you shall conquer. Dare you the task?"

"Sire, I fear only my own incompetence, for surely this is a task beyond mortal man to accomplish. But for your sake and the Princess Ma-Ira's, I will attempt it."

"Then go, Perseus. This royal ring, worn only by princes of the blood, is yours. Your authority is supreme throughout the realm, subject only to our own. The wealth of Mur is yours to command. Spare not. Spare neither man nor woman. But speak no word of your mission save only to old Mar-Kurus, our 'Chief of Research,' without whose wisdom you cannot hope to succeed. Go, in the strength of the Holy Three!"

Still in a daze of wonder at this awful trust imposed on him, Perseus rose, faced Polydactes, and was about to prostrate himself in farewell.

"Not so!" rang out the commanding tones of the king. "You have now our royal signet. You are now our 'Royal Brother in Mur.' Prince Perseus does not prostrate himself."

Amazed at this unheard-of honor, Perseus dropped on one knee in the salutation of princes. "Farewell, royal brother," he murmured hesitantly.

"Farewell, trusted one," returned the emperor in the required formula.

Awaking to the realization of his task, Perseus sprang to the royal salute. Then, releasing the protecting screens, he strode swiftly from the royal apartment.

THE startled guards sprang hurriedly to the salute as this impetuous commander flashed the royal signet before them. Springing into his ship he swung her head out to sea, and with all the power he could apply, headed straight for old Mercurius' research laboratories.

"Well now! Why this terrible haste?" was the old scientist's greeting as Perseus rushed into the laboratory. "You'll never kill any Gorgons that way, son. Oh, yes! I know all about your mission, but haste means failure, even to hot-headed youth."

"Forgive me, Mercurius, I scarcely know what I am doing," pleaded the shame-faced prince. "But is even your wisdom sufficient for this task?"

"No, son, it is not," replied the old man entirely unmoved. "We must go to our satellite the moon and get help there from the 'Selenite Council of Three Wise Women.' Instruct your sub-commander to prepare your destroyer for space travel—there is the radivisor."

In a moment or two the face of a young officer appeared on the screen and orders were given him to stand by prepared for immediate flight into space. Puzzled, but too well disciplined to question an order, he saluted. "It shall be done within two 'kars,' sir."

"By the way, Men-Tarka," added Perseus as he acknowledged the salute, "you are now given the rank of Commander with full command of this vessel, under special and secret orders from myself, now Prince Perseus. My orders supersede any except those of the All Serene himself," and before the delighted officer could utter a word of thanks, Perseus cut the switch.

"Now, son," resumed Mercurius, "we must consider carefully what is to be done. At the very least we need two things. To approach these flying monsters we must have antigravitators such as I alone of earthmen possess. Ordinary fliers will be useless since we must approach unseen. With them we must also use some form of screen which will render us as nearly invisible as possible, and this is beyond my science.

"The Three Wise Women, I know, have such a device, but they have refused knowledge of it to Earthmen, fearing that we are not sufficiently advanced to use it wisely. We may have difficulty about it, even in this crisis.

"What other devices they may have I don't know, but we must also get a weapon of sufficient power to destroy our foes."

"Will your new ray not be effective?" queried Perseus.

"What do you know of my ray?" started out of his calm, the old man sprang up.

"Rumors only," Perseus reassured him, "Your secret is not known, not even to the All Serene himself."

"I don't know, but with your knowledge of weapons we may, between us, devise a way to use it," replied the scientist thoughtfully.

At this moment the door opened and across the threshold stepped a young woman dressed in the trim suit of an aviatrix. Her neat form and unusually charming face attracted the young Perseus so powerfully that he started forward to greet her as one whom he already knew. Then she stopped, looking rather embarrassed.

"Busy, uncle?" she questioned, going across to Mercurius.

"Not too busy to talk to you, my dear. Besides, we need your help," was his greeting.

"Minerva, allow me to present to you the famous commander, Prince Perseus."

For a moment the two young people hesitated, both conscious of a feeling of embarrassed pleasure. Then, recovering themselves, they bowed formally and clasped both hands in the regular greeting.

"So, at last I am privileged to meet the great hero," said Minerva composedly. "Did I hear my uncle speak of you as Prince?"

"You honour me too much," replied the now violently blushing young man. "I have been fortunate in my career—and now I consider myself doubly so," he added after a second's hesitation. The implication of these words, with the bold and meaning glance that accompanied them, was not lost on Minerva, who in turn flushed and turned back to her uncle.

"Tell me, uncle, how I may help."

"Prince Perseus is commissioned by the All Serene to destroy the Gorgons," he explained to the amazed girl. "He believes that we can devise a practical use for my ray as a weapon. Will you, who know all that I do about it, work with him and so release me to prepare for a lunar trip?"

Hearing this, Perseus' face lit up with pleasure, which was heightened by Minerva's reception of the proposal.

"I am not only honoured, but also greatly pleased to work with so worthy a partner," and turning to Perseus, "I truly hope we shall be friends as well as partners."

Perseus' reply to this was evidently satisfactory, although it is doubtful if even Minerva heard just what he stammered out. He evidently found his heroism to be vulnerable to the glance of a woman—this woman at least, for Perseus had not so far shown any great interest in the romantic side of life.

"KAR" after "kar" they worked side by side. Occasionally Mercurius would be called into consultation. Without thought of hunger or fatigue they continued until the failing light reminded them that night was near.



An attendant appeared.

"Will your honours not condescend to eat of the food I have prepared?" he invited rather wistfully, "Will not the work progress faster if you rest a while and eat?"

"You are right, Dar-Keen. To continue longer would be foolish. Come along children." So saying, Mercurius led the way into a beautifully decorated room, where Dar-Keen served the most delightful meal Perseus had ever eaten.

EARLY next morning all three were at work again.

Experiment after experiment was tried—failure after failure began to tell on their spirits—no way they could devise would give them proper insulation for a ray powerful enough to be effective.

Suddenly, a little after noon, Minerva, glancing up from her work, pointed to a little table near the ray.

"Look!" she exclaimed. Standing on the table was a small box of 'alacteons,\* a shining brown compound much used for ornamental boxes. Beyond this box the fluorescent screen, which covered the table, was dull. The rays were stopped by the box!

Strange turn of events! Was the fate of a world to depend on a woman's vanity case?

Working feverishly, they commenced anew. They built, designed, tore apart, rebuilt, altered, tested, started all over again. By nightfall the weapon was complete. At two thousand yards it would heat metals to redness or burn up any organic matter in a moment, and that without any ill effects on the operators.

Another day's work, and a half dozen hand projectors, effective at about a thousand feet, were made and tested.

Supper that night was a joyous function. All was now ready for the space trip. The fiercer had reported everything prepared. The two men had only to climb aboard at midnight—the hour set for departure.

But now a difficulty arose. Minerva insisted on accompanying the expedition. In vain did the two men argue, beg, plead, command. Minerva's mind was made up. In vain they pointed out the risks, the discomforts of space flight. She laughed at them.

At last Mercurius went out to arrange the final details. Perseus, seizing the opportunity, spoke of his love to Minerva. Even without words both had recognized that they loved each other, but now Perseus' pleadings awoke a full realization.

When Mercurius returned, he paused in the doorway—then, with a quiet chuckle, he slipped out again. Apparently he was not unprepared for the discovery he had made.

Of course the woman won. Her final argument that she could not bear to stay alone, especially when they needed her help, was too much for both Perseus and Mercurius, who, by the way, had again returned, this time somewhat more noisily. Minerva went!

OF the voyage to the moon little need be said. Like all such voyages it was tedious and rather uncomfortable. Fortunately all three were accustomed to space travel and so suffered very little from space-sickness.

Pressed to the limits of safe acceleration, they crossed the quarter million miles in a record time of two and a quarter days. Only once did serious danger threaten them. A little while before they reached the gravity-neutral, a huge meteorite passed within a few miles of

them. So big was it that the automatic repellers were ineffective and only the genius of young Men-Tarka, in forcing the great ship sideways with all her auxiliary power, saved them. As it was, a perfectly good dinner was wrecked, and for several days many of the crew bore marks of the terrific jerk they had received.

Landing at the lunar capital, they hurried to the palace of the Three Wise Women. As they expected, they found them in their private laboratory. Mercurius had warned his companions to expect an abrupt greeting, but even so, the hostility of the Lunarians amazed them.

It appeared that they had interrupted a series of observations which were intended to determine whether the atom is a solar system capable of supporting life on its planetary electrons—a fascinating subject no doubt, but not of any great interest to Perseus at the moment.

When the storm of opposition died down, Mercurius very diplomatically put his case before the Three.

"Help *You*; help you uncivilized earthlings! Never! Not in a thousand generations!" almost shrieked the oldest of the three.

"I think you will," interposed Perseus quietly but pointedly. "Look at your microphotoscope."

Surprised into compliance by this strange remark, the three turned. Then, with cries of rage, they snatched at their power levers, ready to destroy their visitors.

Without an instant of hesitation Minerva snapped out her ray pistol. A flash and the three stopped—sank groping to the floor, moaning in pain and fear.

"What *have* you done?" exclaimed Mercurius aghast, "You've killed them!"

"Merely saved our lives," calmly replied Minerva, "They'll be all right in a little while. I saw Perseus slip their diamond lens into his tunic and was prepared for trouble. I set my ray at its weakest impulse so that they would not be seriously injured. Just now they are blinded by the effects of the ray on their optic nerves, but they will recover and then we can dictate terms."

After a while the old women recovered their senses, but all three of the visitors felt extremely sorry for the shock they had been forced to give them. With profuse apologies Mercurius explained their difficulty and the desperate nature of their need, which had caused them to take such drastic steps.

The Wise Women, who at heart Mercurius knew to be the kindest of beings, in turn regretted their churlishness and promised to give all the help possible. "But," anxiously asked one of them, "our diamond lens? You've not injured it?"

"Not a bit, here it is," grinned Perseus returning it with the air of a mischievous schoolboy.

Detailed explanations followed. The Lunarians could not supply any of the needed things at once, but arranged to have them made immediately. The antigravitators could be prepared within a "kar," but the shields—they suggested a light-refracting screen which produced invisibility—would require about two earth days.

Since these screens refract all visible light around the object to be hidden, it is impossible for the wearer to see through them without a special device. This also had to be built. It appeared to be an apparatus by which the ultra-violent rays were "stepped down" into visible frequencies. The shorter ultra-violet rays are not refracted by the screens. A small control box is strapped to the wearer's chest and a pair of curious eye-masks are fitted over the face.

\*Probably something of the same nature as our "bakelite."

These devices had one serious defect for the particular work in hand. The Gorgon's telepathic paralyzing ray would be carried along with the ultra-violet light into the eyes of the wearers. Now the Gorgon's ray is only fully effective when entering the eyes, since only so does it penetrate to the brain centres by the retina. If this ray were to be conveyed to the attackers along the ultra-violet beam, then all their other armament would be useless.

The Three Wise Women talked, figured, discussed, planned. Finally, with a combined sigh of relief, they looked up. "A selenite mirror," they explained. "Certain alloys of selenium have the power of reflecting all light rays, even to the ultra-violet, but they will absorb nearly all other rays. Our calculations indicate that a mirror of one of these alloys will absorb most of the Gorgon ray, and will protect you. On no account view the Gorgons directly. Look at them through the selenite mirrors, we shall have made for you. You will then be safe, as the Gorgon ray will be absorbed and will not reach your eyes.

"Remember, one direct glance at them, if their tentacles are focussed on you, and no power in the Solar System can save you, not even your invisibility screens. Remember, too, that your invisibility is not quite complete. Clear sighted beings can detect a haziness of outline, and the Gorgons have marvelous sight.

"Be warned. Discretion must temper valour if you would save your world. Your armament will be delivered to you at your ship."

Abruptly, and without waiting for thanks or farewells, the three old ladies turned to their phones, spoke a few words of instruction, and returned to their research as though they had never left it.

THE following days dragged wearily. The time allowed Ma-Ira was all too short, and the three friends were impatient to get into action. Probably only Minerva's gentleness and tact prevented the two men from becoming unbearably irritable.

At last, on the third morning (Earth time) a messenger arrived with the equipment. With no further delay they started for earth.

Officers and crew all seemed filled with enthusiasm and excitement. The thrill of a secret mission, added to their love for their prince, spurred them to almost superhuman effort. Time and again during the early part of the trip there came through the phones, "Can you stand more acceleration?" and each time three people would nod to each other and back would go the half strangled "Yes, go ahead."

Their bodies seemed to weigh tons; their breathing was forced and laboured; none of them could move freely, only by means of the handholds could they drag themselves about at all. Even lying still on their padded couches they suffered intensely.

Those who have never experienced the strain of great acceleration are often puzzled about the sensations produced. They say "But an acceleration equal to two or three times earth's gravity will only give the effect of being under a weight of two or three hundred pounds distributed equally over the body!" This weight, they argue, is by no means insupportable, is in fact, when properly distributed, scarcely more than an inconvenience. Why then should the same effect of apparent weight produce such strains in space travel?

A little thought will soon clear up the mystery. When, in demonstrations on earth, a person supports a weight of several hundred pounds on his body, this weight is supported almost entirely by the bony skeleton and the outer muscles. These are the strong framework of the body and are so constructed that they can support great strains. In the weight caused by acceleration, however, the strain is distributed throughout the *whole* body, internal organs included. Now these organs are delicate and only lightly attached to other parts. When the weight of acceleration grips them they are dragged downward and out of shape. Thus the whole internal economy of the body is upset, the heart is dragged down, causing strains on all its muscles, the lungs are flattened and can with difficulty only lift themselves to pump air, the brain itself is affected. This latter phenomenon is apparently the one that produces the illusion of infinite time—a condition which adds tremendously to the discomfort.

So it was with our voyagers. Centuries seemed to pass. Then—"Take warning. We are ceasing to accelerate," came through the wires.

The contrast was unbelievable. Within a few "anars" their torturing, crushing weight had vanished and they floated lightly about the cabin. A deathly vertigo seized everyone on board as their bodily organs strove to adjust themselves to the changed conditions. Even the toughened space veterans became confused and dizzy. Their heads felt as though they would burst, as their brains reacted to the release of the strain.

Scarcely had they become used to this, when—"Stand by for deceleration equal to earth gravity."

The car swung about its axis with a sickening lurch, and then steadied. What a relief! Now they stood on the floor (the end wall it would be on earth) as though they were in their own homes.

The commander held the deceleration at this amount just long enough for all to get a meal and a short spell of rest. The speed must have been terrific, though, now that the pressure of acceleration was gone, they scarcely realized it. The speedometers and accelerometers had long since been taxed beyond breaking point and Men-Tarka was navigating on a sort of dead reckoning. Had a meteor approached closely, nothing could have saved them. Their speed was too great for them to detect anything in time to repel it. Their path seemed to be almost miraculously cleared for them, for, at that speed, even a tiny meteor flake would have gone through them like a bullet.

Again the phone call, "Look out for full deceleration!"

Again that awful crushing weight; again that terrible fighting for breath; again that agonizing pounding of the heart, that helplessness, as though the gravity of a hundred worlds had chained them.

Centuries—aeons—eternities passed! Still that awful strain continued. Would they never reach earth?

A feeble glance out below them (as it seemed) showed the great sphere rushing up towards them with tremendous speed. Would even this tremendous braking deceleration stop them in time? Were they going so fast that they must crash into their own world?

At last another signal. The pressure relaxed. Their weight again became normal. Again they could breathe.

More violent swinging of the ship, and then—back on the normal floor, they drifted quietly down into Earth's atmosphere. The awful journey was over.

"How long?" asked Perseus of his captain.

"Not so bad!" replied the other with a grin, "A little less than half a day!"

"*What!*" exclaimed the others with a single incredulous shout. "*Impossible!*" went on Mercurius, "You can't tell us we were only crushed down on those couches for a few hours! Your chronometers must have been broken along with your speedometer!"

"Look for yourself, sir," came the chuckle of the officer, who was as elated as a kid who has just pulled off a clever trick. "We are right over the big time dials of Rapani."

Never before had a space ship accomplished such a marvel. Why they had not been killed outright was a complete series of miracles. Surely their gods had fought for them again.

But now came another unexpected delay, although one which should have been foreseen. As soon as they were rested, they fitted on their armour for a test. Their antigravitators gave no trouble. Within a short time they were flying around like birds. Their invisibility screens worked perfectly. Their ultra-violet light reducers gave them satisfactory vision but—

Have you ever tried to make even a very simple drawing while viewing it by a mirror? If not, try it and you'll appreciate the difficulty of trying to shoot at an active enemy when you may not look at him directly. Add to this the difficulty of being able to see only along a narrow band of ultra-violet light, and you'll realize what our friends were faced with.

Wild at the delay, the three set out to conquer their difficulties. For three days they fought each other in mock battles, using light rays instead of disintegrators. Even then their aim was far from certain, but half the allotted season had gone and they dared delay no longer. Only their marvelous trip from the moon had enabled them to take any time at all for practice.

At length they boarded their ship again and were carried to within two hundred miles of the Gorgon's headquarters. There they left the ship and flew to the attack, hiding in their screens whenever any other fliers came near.

Again the gods must have favoured them for, finally, Minerva's keen eyes picked out the ugly form of a Gorgon. It was alone; the others were nowhere in sight.

Cautiously they approached. Now the hideous beast arose and gazed around as if scenting danger. At once they snatched out their mirrors and looked no more directly at Medusa, for they already felt the ray upon them.

Even viewed by the mirrors the sight sickened them. A huge, scaly, dull-gray body like that of a great dinosaur supported itself on six massive legs. Above the back rose a pair of huge leathery wings. From the chest reared up a long scaly neck with two semi-human arms growing out from the shoulders. Above all the ghastly head, no larger than that of a child, raised itself.

Imagine, if you can, a perfect human face, wondrously beautiful, yet with an expression of diabolical malice. Surrounding it a semi-circle of loathly snake-like tentacles, a dozen of them at least, each a yard long, pale flesh coloured, writhed like boneless human limbs. At the end of each an eye, lidless, glowed with a baneful, cold, green light.

It was these eyes that sent out the awful, paralyzing force, and never did more than two or three of those eyes sleep at once.

Now, apparently certain that danger threatened, the monster commenced to search around with its tentacles. Now the attackers realized the full value of their mirrors, for even through their screens they could feel the tingling effect of the powerful forces flung about them.

By the time they had approached to within six hundred feet the monster had caught sight of them. Even with the screens fully closed, the slight distortion of the light was visible to the keen-eyed Gorgon.

The great wings unfolded for flight. In a moment Mercurius sent down a flashing, scorching ray. A lucky shot, it seared a great cut across the middle of one wing. Now they could hear the fiendish hissing of the enraged brute, as it tried in vain to rise into the air.

Nearer they hesitated to approach. Time and time again their rays started downwards, but their aim was too uncertain and they could not hold the rays on the Gorgon for a second.

Finally Perseus, enraged at their failure, exclaimed, "I'm going closer to get that beast before the others come. If it gets me—"

"I'm coming with you," broke in Minerva impulsively.

"No!" commanded the prince, "One at a time. If we go together we have one chance only. If I go alone and die, Mercurius can make a second attack, and if he too, fails, you, my dearest, can get back to warn the world."

"Rubbish!" countered Minerva, "If you and uncle are killed, I'll get it on the third try. If not, warning the world will be useless," she added bitterly.

Down dove Perseus like a flash, right down to within sixty feet of his enemy. Now the tension of the paralyzing rays was so intense that, even with all his protective devices, he felt himself almost overcome. Again and again he shot his rays. It seemed hopeless. Only a few charges were left.

Suddenly the Gorgon reared up in an attempt to reach this almost invisible menace. The great, ugly throat was exposed. The mirror caught its reflection, and Perseus, with a tense effort, aimed blindly and—struck.

A scream of intense agony, and the hideous head fell forward. Medusa was dead!

Swiftly he landed. With his ray he sheared off the head. Groping blindly he lifted it with gloved hand and forced it into his screened side-sack.

"Quick!" came a shriek from Minerva. "Look to the north!"

Medusa's scream had been heard. Flying at terrific speed came the other two Gorgons. The battle now became titanic. The rushes of the Gorgons almost overwhelmed the flying humans, yet they fought on. Perseus dared not fire freely as his pistols were nearly done.

How long the fight lasted none of them ever knew. After what seemed hours, Minerva caught one of the beasts squarely in the head and sent him hurtling into the sea.

Now the other turned and fled, but even as he did so, Perseus, chancing everything, looked directly after him, aimed steadily, and with his last remaining charge struck him full in the back. The Gorgons were destroyed!

Jubilantly they returned to the waiting vessel. At last they could disclose their mission and their victory. The crew went wild with joy. Straight for home headed the great ship!

Yet all was not well. Not a single reply could they get to their radio messages. Not a single word of congratulation reached them. What was wrong? No one

could even guess, yet all felt that some calamity had overtaken their nation.

As they approached the capital, an ominous stillness brooded over the place. Where were all the multitudes of fliers? Where the patrol ships?

"I don't like it!" muttered Perseus. "Let's land."

**S**LOWLY, majestically, the great flier settled in the palace yard. Why was there no greeting? Why no challenge of the guard? Late as the hour was, there should at least have been sentries posted. Their failure to get replies now began to look more ominous than ever.

Out from the ship stepped three very solemn figures, followed closely by an armed guard. Across and up to the very door of the Council Chamber they went without challenge.

The sound of voices from within told them that the Council of Princes was in session even at this hour of midnight. As was his right, Perseus entered. Facing him was the great black throne, but on it—not the young Polydactes, but the king's uncle Fero-Tan-Actu.

"Well, what is *your* business?" was the abrupt challenge from the throne.

Instantly Perseus grasped the situation. Fero-Tan had at last succeeded in trapping, perhaps killing, his nephew.

Right to the foot of the throne he marched, his companions following.

"Where is the All Serene? My message is for him alone," he demanded.

"Here," snarled Fero-Tan, "on this throne. But perhaps you refer to that young upstart Polydactes. Well, he's safe enough in the cells with his sweetheart. Tomorrow at dawn they shall be slain—and," he added slowly, "you and those with you also!"

Perseus took a swift stride forward. His ray pistol flamed out and pointed full at the usurper.

"Let a man move and your scoundrelly leader dies. This weapon shall blast him and his throne to nothingness."

"Now," he continued, "what means this usurpation? Answer before my finger throws the lever."

Fero-Tan, coward at heart, looked furtively around. Would his council not come to his aid? Would no one call his guards? No. It was left to him to face his accuser.

Hesitantly he spoke as Perseus shifted his thumb along the butt. Little did he know that the pistol had been exhausted in the last great fight with the Gorgons, and that, had he dared, he could have slain Perseus where he stood.

"I was forced to it, Perseus. The Gorgons have threatened Mur. Polydactes, the fool, would have resisted and brought about our utter destruction. To save the people we took command."

"Liar and coward!" burst out Perseus, "The Gorgons are dead!"

A roar of laughter greeted this statement.

"Now we know you are mad," exclaimed a noble, "for the Gorgons are immortals."

"Liar, thou also! I have slain the Gorgon Medusa with my own hand, and with the aid of these my companions have I destroyed her brothers also. The Gorgons are no more."

These words were greeted with a storm of hisses, hoots, shouts and laughter—yet no man moved.

"Give us proof," demanded Fero-Tan at length.

"Proof!" exclaimed Perseus contemptuously, "If I give you proof, you die!"

Again the ironic laughter.

Maddened at last beyond control, Perseus snatched at his side-sack.

"Die then!" he panted. Snatching out the head of Medusa, he tore off its protecting veil and hurled it into their midst.

Knowing what would happen, Perseus and his companions turned their heads, and he, alone, through his selenite mirror, saw the fate of that council.

As the revolting head rolled out, its ghastly antennae still charged with power, there came one awful shriek of agony. Fero-Tan and those near him sat rigid as stone. Those out of direct range stood frozen with terror, gazing fascinated on their leaders, locked in that agonizing, living death.

Appalled himself, Perseus turned. "Go! Fly before the power of Medusa reaches you! Oh, ye remaining nobles, take your one chance of life!"

His words broke the spell and those still able to move dashed madly from the palace.

Slowly, sadly, Perseus motioned his followers to retreat to their ship. From his tunic he took his one remaining bomb, released its catch and tossed it into the arena.

Even as he reached the outer steps, the explosion hurled him to the ground. Medusa and her victims were no more!

Dazed and bruised, Perseus picked himself up to find himself facing his father.

"A *very* dignified exit for a royal prince, I must say," was the old man's greeting. A few words of explanation, and guards were dispatched to release the king and the princess.

Although the night was far advanced, Par-Actu ordered the General Assembly to be sounded on the sirens. By the time the royal party had reached the remains of the palace steps, the whole court was crowded with men and women.

Quietly Polydactes stepped forward. Clearly his words rang out in the impressive silence over the prostrate people.

"Men and women of Mur, rise. Once more and once more only in the history of Mur shall her people lie prostrate before a king. Our enemies are dead. Our lives are preserved. This day we, your emperor, declare that henceforth ye are a free people, who shall do only the homage of princes."

"As king and high priest we here proclaim the union of the empires of Mur and Cho-San united under the joint sovereignty of ourself and our queen, whom we here declare our royal wife and equal."

Never has the city heard such rejoicing. For full a dozen "anars" it continued unabated.

At length the emperor raised his hand in the royal command for silence.

"Peoples of Mur, hear us. You are not assembled here to honour our royal self, but to do homage to him who is henceforth called 'Hero and Saviour of the Race,' to Perseus, now appointed king of our province of Cho-San. To him we give in marriage our well beloved Minerva—to reign with him as his equal."

Again the cheers rang out—echoing and reechoing along the city walls.



Again the emperor spoke.

"I have said that once more and once more only shall Mur prostrate herself before a king. Now is that time. Down on your faces! Down, and make adoration to your preserver, Perseus the Hero, the Saviour of the Race!"

For a space Perseus stood amid the universal silence. Then, conquering his emotion, his queen by his side, he raised his hands in the royal blessing.

"Rise, my people. For this homage we thank you. Your Serene Ruler has rightly decreed that never more shall a Lemurian debase himself. We, Perseus and our

royal wife Minerva, do here decree that at this hour each year, Mur—every man, woman and child—shall stand and, facing the rising sun, raise the hands in thanksgiving to the Divine Three—the Creator, the Director, the Preserver!"

His voice rang out like a trumpet call.

"Behold! The dawn comes! Give thanks, Oh Mur!"

Slowly the golden disc of the sun rose out of the sea. As one man they turned. With a single movement every hand was outstretched, every head bowed as with one voice they murmured:

"Our Gods, we thank Thee!"

THE END

## Troyana

by Capt. S. P. Meek, U. S. A.

(Continued from page 1127)

"Rush it!" he cried springing forward.

He had gone only a few steps when the ray caught him and he paused in midstride, one foot grotesquely raised. He swayed for an instant and then fell with a crash. With cries of alarm the nobles of Troyana broke and fled, seeking shelter from the paralyzing ray which the Atlanteans were using with such deadly effect.

Only Jereboam held his ground, thinking rapidly. He was sheltered from the ray by a cylinder containing one of the Atlantean queens and was in no immediate danger. After a moment of concentrated thought, he made an adjustment to his lone remaining flashtube. He aimed it carefully at Nankivell and touched the release button with a finger.

END OF PART II

## What Do You Know?

**R**EADERS of AMAZING STORIES have frequently commented upon the fact that there is more actual knowledge to be gained through reading its pages than from many a text-book. Moreover, most of the stories are written in a popular vein, making it possible for anyone to grasp important facts.

The questions which we give below are all answered on the pages as listed at the end of the questions. Please see if you can answer the questions without looking for the answer, and see how well you check up on your general knowledge of science.

1. What is the greatest triumph of knowledge? (See page 1063.)
2. How far back can we trace investigation of the world of nature? (See page 1063.)
3. What does the word atom mean? (See page 1063.)
4. What simple law of falling bodies did Gallileo demonstrate? (See page 1063.)
5. What could arithmetic do and did it do for chemistry? (See page 1063.)
6. Who are regarded as the founders of chemistry and on what did they found it? (See page 1063.)
7. What effect may machinery have on human employment? (See page 1066.)
8. What is the origin of the word "assassin"? (See page 1086.)
9. What is Tycho on the moon? (See page 1096.)
10. At a speed of ten miles a second, how long would it take to go to the moon? (See page 1098.)
11. What feature is characteristic of Tycho? (See page 1101.)
12. What odd conception of the relation of time on an electron to time on the earth has been suggested? (See page 1104.)
13. Give some examples of the errors of scientists due to their incredulity? (See page 1137.)
14. How may scientific principles be classed? (See page 1137.)

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# The Degravitator

By Ralph Milne Farley



*Even as he spoke, there came a flash and a bang behind him, and he plunged forward on his face, enveloped in thick, yellow smoke.*

**F**ORTUNATELY I was a member of the small and select committee of scientists and industrialists, chosen by the United Airways, Ltd., to investigate the claims of Conrad Hughes that he had discovered a simple means for neutralizing the force of gravity.

There was Cathcart, the chief engineer of the Airways; Higginbotham, their vice president; Professor Joyce from the State University; Dr. Birkhoff, the electrical wizard; and myself. We called by appointment one afternoon at the unpretentious laboratory of inventor Hughes on the outskirts of Boston.

We had expected that he would turn out to be the typical perpetual-motion crank; shaggy haired, unkempt, wild-eyed, and a bit furtive. But we were pleasantly surprised, for Conrad Hughes was quite a different personality. We all took an instant liking to him.

He was young, between twenty-five and thirty. Neatly, although inexpensively dressed. Gentlemanly and cultivated, quite evidently a college graduate. Quiet voiced and diffident, and not at all boastful or self-assertive.

As we introduced ourselves, I overheard Chief Engineer Cathcart say, in an aside to Vice President Higginbotham, "Here is a

***HE** who could penetrate to the secret of gravity would be a benefactor of mankind indeed, for it is the problem of gravity, probably more than any other factor, that hampers the success of rocket experiments. It is not at all impossible that, by the irony of fate, it should be given to the imaginative author who dabbles in scientific theories to hit on the right method of procedure. Surely it is a good field, and Mr. Farley makes the most of his opportunities.*

Illustrated by MOREY

young fellow I can use in my department, even if he hasn't invented a way to neutralize gravitation."

The laboratory was a simple shed, about 20 by 40, but inside it was crammed with work-benches and electrical and chemical apparatus. No disorder, however; everything was neat and in its place. I remember being particularly impressed with seeing a new broom, a dustpan, and a brush, standing in one corner beside a galvanized-iron rubbish-can with a neatly closed cover.

Conrad Hughes bade us be seated, apologized for the condition of his chairs, and put on a linen smock which he took from a peg on the wall.

"Let's get right down to business," said he, efficiently. "You have come to see my degenerator. But before I show it to you, let us reach an understanding as to what I want."

"We want the exclusive rights," interrupted Vice President Higginbotham, "and will pay you well for them, if the thing works."

"Yes?" interrogated the young inventor, politely, yet with a touch of sarcasm in his voice. "Well now, gentlemen, it may surprise you to learn two things: first, that I have no delusions of grandeur as to the millions which my invention is going to bring in to me; and secondly, that I have sufficient confidence in you gentlemen to be willing to deal with you as gentlemen, instead of trying to tie you up to an iron-clad contract, which your lawyers would probably be clever enough to worm out of anyway, if you weren't on the level."

Higginbotham murmured some words of appreciation, and young Hughes continued, "I love to experiment. This degenerator is only one of my projects. I have nobody dependent on me. And so, if you gentlemen, after seeing my degenerator work, are willing to take me on at a living wage, with plenty of funds for laboratory equipment, then I am willing to sign up with you."

Higginbotham and Cathcart exchanged glances, and with difficulty concealed the gleam of exultation in their eyes.

"Quite reasonable," replied the vice president.

But Professor Joyce whispered to me, "Of course it's all impossible."

Conrad Hughes overheard. He wheeled around.

"What's impossible, professor?" he asked crisply.

Thus cornered, Professor Joyce assumed his most academic manner, and replied, "Your degenerator, young man. Certain scientific principles may be regarded as still open to demonstration. Certain others, such as conservation of matter and conservation of energy, are fixed and immutable. If you say to me that you can convert lead into gold by the use of electricity, I am willing to watch your proof. But if you claim, for example, that you have invented perpetual motion, I do not need to waste my time and yours investigating your claims, for I know in advance that perpetual motion is contrary to nature."

At this point, Conrad Hughes interjected, "Some of the leading scientists of America hailed Professor Langley's attempts to fly as being contrary to nature, as an absolute absurdity, and a senseless waste of government money. And when the steam locomotive was invented, the scientists conclusively proved that no human being could survive traveling at a greater rate of speed than twenty miles an hour."

"Don't interrupt me, young man!" exclaimed Pro-

fessor Joyce, forgetting that he was not at the moment in his classroom. "As I was saying, all these gravity-shields, and gravity-motors, and degenerators, that one reads about in scientific fiction, violate fundamental principles of physics. Even an elementary education would show their authors that they are impossible. A gravity-shield would itself absorb whatever force it intercepted, and thus the combined weight of the aircraft and its shield would remain the same. A motor requires both a source and a sink; where are you going to pour the used-up gravity which runs through your gravity-motor?"

"But, Professor," interposed Higginbotham, "this young man is not claiming either a gravity-shield or a gravity-motor. Let's see and test what he actually does have. And then you can raise your objections."

"Yes," I added. "The highest court of England has recently overruled the practice of the British Patent Office to refuse patents on perpetual motion devices, the court taking the very commendable attitude that nothing can dogmatically be asserted to be impossible."

Professor Joyce grumpily subsided.

"Show us your device, Mr. Hughes," prompted Birkhoff, the electrician. "I am open-minded, although frankly skeptical."

"First let me answer Professor Joyce," replied the young inventor.

He then pointed to a simple apparatus on a nearby bench. There was a single-pole electro-magnet, rigidly mounted on the bench, in a vertical position. A leaf-switch controlled the two circuits which ran to this magnet. Around the foot of the magnet, a brass ring lay on the bench. Three loose silk threads ran from three widely separated points on the ring, to three screw-eyes set in the bench at 120 degrees intervals about the foot of the magnet.

YOUNG Hughes raised the ring with his fingers, until it lay horizontal in the air several inches above the top of the magnet, with all three threads taut. Then he closed the leaf-switch and let go of the brass ring. The ring remained motionless, floating in the air above the magnet!

Higginbotham, Cathcart and I were much impressed.

But Professor Joyce snorted, "Old stuff! Is that what we've come all this distance to see? Every scientist knows that an alternating current magnet will induce, in a brass ring, electrical surges of such a sort that the ring will be repelled. It's a demonstration regularly given in Freshman Physics at most colleges."

Dr. Birkhoff nodded in affirmation.

Conrad Hughes, however, was not a bit nonplussed. He smiled, as though he knew some concealed joke.

"Well, doesn't that constitute degeneration?" he asked innocently.

"Certainly not!" snapped the Professor. "It's merely opposing the force of gravity with another force, the same as when you first lifted the ring with the force of your muscles."

"That might be regarded as a sort of degeneration, too," replied Conrad Hughes quietly. "But there is this difference. Muscular force is a true force, actually applied to the ring. Whereas magnetism, like gravity, if I correctly interpret the Einstein theory, is not a force at all, but is a mere distortion of space. Am I right?"

"Quite true," admitted the professor, a bit shamefacedly.

"But the question before us is a *practical* one," asserted Chief Engineer Cathcart. "Regardless whether you *call* gravity a force or a mere geometrical phenomenon, it isn't going to be any more practical to repel a rig-shaped brass airship by means of a series of alternating-current magnets placed on the ground, than it is by a series of derricks or other forms of direct physical contact. What we need is a degravitator which can be carried by the airship which it degravitates."

"And that, of course, is impossible," added Professor Joyce, smugly.

"Is it?" asked the young inventor, artlessly. "Well, then, look at this."

And he led us to another bench, on which rested a small model of a dirigible balloon, about two feet in length. A flexible lamp-cord ran from the model to a slide-rheostat.

Hughes plugged the rheostat into a wall-socket, and then said, "Mr Higginbotham, I will give you the honor to be the first person, other than myself, to actually experience the degravitating of a physical object by means of apparatus contained within that object itself. Will you please hold this little dirigible on your upturned palm—so."

The vice president of the United Airways, Ltd., extended his hand as directed; and young Hughes balanced the model carefully upon it.

"How much should you say that it weighed, sir?" he asked.

"About five pounds," estimated Mr. Higginbotham.

"Now observe."

Slowly the inventor slid the slide along the coil of the rheostat. An expression of amazement flooded Higginbotham's face.

"Why! Why!" he exclaimed. "It's actually growing lighter."

"Certainly," replied Hughes. "Now remove your hand."

The vice president did so. The little airship hung unsupported in the air!

But Professor Joyce snorted, "Very pretty! But how do we know what's concealed in this work-bench? The Keeley motor performed wonders in the early nineties. Developed hundreds of horsepower for hours at a stretch, supposedly on no more actuating fuel than a teaspoonful of water. Then Keeley died, his laboratory was raided, and an elaborate system of concealed pipes was found. His wonderful motor had really been run by compressed air! There is probably a similar trick here."

"I rather expected some such comment as that," replied Conrad Hughes levelly, "and so I have provided about a hundred feet of cord."

He shifted his rheostat slowly back to neutral, and the airship settled gently down upon the bench. Then he produced the long cord, and spliced it into place.

When he had finished, he said, "And now, Professor, will you please pick up my little model, and choose your own locale for the experiment. Take it out into the yard, if you wish; the cord is long enough. I can't very well have mined every square-foot of ground within a hundred feet of this rheostat."

"I don't know. You might," asserted Joyce, not in the least impressed.

"Come, be a sport, Joyce," Dr. Birkhoff urged.

"I tell you what," suggested Cathcart. "Let's take the whole apparatus down to the filling-station on the corner, and plug it in there."

But Conrad Hughes demurred.

"No one knows about my invention," said he, "except the six of us. If we demonstrate it in public, it will be in all the newspapers before night, and my laboratory will be raided before tomorrow morning."

"Quite true," murmured Vice President Higginbotham, "so I have another plan. Do you know any of the neighbors, Mr. Hughes?"

"Only the man who runs the filling-station," replied the young inventor. "He lives in the house just this side of it."

"Then," suggested Higginbotham triumphantly, "let Professor Joyce pick any *other* house on the street, and we'll test the apparatus there. That should constitute a fair test, with no possibility of collusion."

But again the inventor objected.

"I can't see that that is any better, sir," said he. "The news will leak out just the same."

"I can fix that all right," Higginbotham asserted imperiously. "Wrap up your apparatus so that no one can tell what it is, and follow me."

The young inventor meekly submitted.

AT the first house which we tried, the door was opened by a pleasant-faced young matron.

"Madam," announced Mr. Higginbotham, "this young man here has invented a new kind of vacuum-cleaner."

"Oh, I'd so like to have a vacuum-cleaner!" she exclaimed. "But we can't afford it. We're too poor."

"No, no," expostulated the Airways executive. "We aren't *selling* them. We merely want to borrow a little of your electricity, to see if the thing will run. A fuse blew out over the inventor's shop, and we can't wait. So, if you'll let us plug-in in one of your sockets, we'll give you ten dollars, and you can use it toward buying a real vacuum cleaner for yourself."

The temptation proved too strong for her. It overpowered her natural caution against admitting six strange men into her home.

"All right," she assented, a bit reluctantly, and led us into the house.

Quickly the plug was inserted into one of her sockets. Then, noticing that she hung around with interest, Cathcart, always practical, asked her if she would mind getting him a glass of water.

During the few minutes that she was gone, the young inventor unwrapped his bundle, handed the model airship to Professor Joyce, and rapidly caused it to float off the hands of the amazed scientist and up to the ceiling.

By the time that the lady returned with the water, everything had been packed up again, and we were ready to depart.

"It worked perfectly," Higginbotham informed her, handing over a ten-dollar bill.

Then, to her evident surprise and thwarted curiosity, we all left.

Back at the laboratory again, we were loud in our praise of the success of the test. Even Professor Joyce began to be convinced, though he still insisted dogmatically that it was "contrary to nature."

Young Hughes put the apparatus away, donned his



smock again, adjusted the flames under some chemical concoction which he was brewing, and motioned us all to take seats near the door.

"I'm working on a new internal dye for metals," he explained, as he joined us. "The reaction is a bit dangerous; that's why I'm having you sit near the door. It's for use in connection with a synthetic gold of my own devising. I've developed an alloy, which is identical to gold in specific gravity, ductility, conductivity of heat and electricity, and a number of other qualities, but which unfortunately is white like silver. If I can dye it yellow, my experiment will be complete."

Vice President Higginbotham's face fell.

"In that case," he said sadly, "our money will be no inducement to you."

"Oh, yes it will," laughed Conrad Hughes, "for there are still at least one or two chemical reactions which my synthetic gold will not produce. Promise me *real* money, and I'll be with you."

A bargain was quickly struck. The young inventor was to receive ten thousand dollars a year for life. One hundred thousand dollars was to be expended on outfitting a laboratory for him, and he was to be allowed a budget of fifty thousand a year for its upkeep. In addition, he was assured that if any other of his inventions developed great commercial possibilities, the United Airways, Ltd., would do the fair thing in the division of royalties.

The deggravator was to be patented at once. Young Hughes was to confer with the Boston patent attorneys of the Airways on the morrow.

Of course, it was clearly understood that if at any time, anyone representing the Airways could discover and prove that the deggravator was a fake, the entire deal could be declared off, at the option of the Airways.

Professor Joyce brightened up quite noticeably at this last announcement.

"I still can't see how the thing can possibly work," he muttered. "Maybe you have merely hypnotized us, just as the Hindu fakirs do with their mango-tree trick."

"The dogmas of science die hard," I asserted, "even in the face of actual demonstration. That's why scientific fiction, and even what David Starr Jordan calls 'the lunatic fringe of science', persist in spite of the howls of their detractors."

"Perhaps," interposed Dr. Birkhoff, "now that the deal has been closed, Mr. Hughes will explain to us just how his invention works."

"Gladly," replied the young inventor. "It is based on Einsteinian principles. Einstein's fundamental thesis is that gravity is not a force, but rather is merely a distortion of space. Heavy bodies distort the space around them, and thus cause other bodies to roll toward them. Perhaps I can illustrate it to you by means of a two-dimensional analogy."

So saying, he produced a horizontal frame, two feet square, mounted on four short legs. Across the frame was stretched a sheet of thin elastic rubber.

"This," Hughes explained, "is a plane, an undistorted bit of two-dimensional space. And now observe the effect of distortion."

Picking up a heavy steel marble, he placed it on the sheet of rubber, causing the sheet to sag.

"See!" said he, "This little bit of two-dimensional space is no longer Euclidian. In the vicinity of that gravitating body, the shortest distance between two

points is no longer a straight line as it was before."

"True," admitted Professor Joyce, half to himself. "The geodesics are curved, as in the Einstein theory."

"What's a geo-something?" asked Vice President Higginbotham.

Dr. Birkhoff explained, "A geodesic is the shortest distance between two points. On the surface of the earth, the geodesics are great circles. On a plane, or in space as it was imagined to be before Einstein, the geodesics are straight lines. Light travels in space on a geodesic. Einstein proved that the path of light is curved as it passes near masses of matter just as straight lines on the surface of this piece of rubber are curved as they pass near that little steel ball. But go on, Mr. Hughes. Excuse us for interrupting you."

The young inventor smiled appreciatively at the electrician's explanation.

"Now," said he, "I shall show you the analog of gravity."

He placed a second ball on the rubber surface. Slowly at first, but with gradually increasing speed, the two balls rolled together.

Hughes explained, "It is all due to the distortion of their space. If we were two-dimensional creatures, living in that sheet of rubber, we could not observe its distortion, but only the *results* of that distortion, and we should call those results 'gravity.' Similarly, in our three-dimensional space, we cannot see the distortion, but we can observe, and give a name to, its results. Gravity, then, is local to each gravitating body, and is caused by that body itself. The cause is the distortion of space in the immediate vicinity of each body. If we can remove that cause, we can remove its effects, and thus neutralize gravity."

"But how can one possibly straighten out the kinks in space?" Professor Joyce exploded.

"That," replied young Hughes, a bit maliciously, "is the whole secret of my invention. First I practiced on two-dimensional space, where I could actually see the 'kinks', as you call them, and could actually ascertain whether and to what extent they were being straightened out. And, when I had succeeded in two-space, I extended my apparatus by analogy to three-space."

"Yes, yes," interrupted Dr. Birkhoff. "But how did you go about it? What apparatus did you use?"

"I am just getting to that," replied the young inventor patiently, "I employed the well-known electrical principle of—"

A violent hissing-sound came from the rear of the laboratory. Conrad Hughes jumped to his feet.

"Just a moment gentlemen," said he. "One of my beakers is boiling over."

And he sped to the scene of the trouble. For a minute or two, he fussed with his chemical apparatus, while we watched him from where we sat.

"It's all right now," he announced turning back toward us.

But even as he spoke there came a flash and a bang behind him, and he plunged forward on his face, enveloped in thick yellow smoke.

Holding our breaths, Cathcart and I dashed into the smoke-cloud, and dragged Hughes out.

"Give him air!" shouted Higginbotham.

So we carried him to the door. The laboratory behind us was rapidly filling with the acrid smoke.

Out in the yard, young Hughes opened his eyes.

"I'm done for," he gasped. "It's got my lungs. But I want to go down in fame. I want to be remembered, and have statues built to my memory. Quick, Professor Joyce and Dr. Birkhoff. The two of you have the scientific basis to understand what I have done. It is very simple."

He coughed several times. A deep wracking cough.

"Water!" he gasped.

Cathcart ran for water.

"The principle is—," Hughes began again. Then coughed some more.

"Water!" he almost screamed.

Then more coughs.

Cathcart returned with the water, and held it to the lips of the dying man. Conrad Hughes took a deep swallow. Then coughed up a bloody stream. His body shuddered, and relaxed.

"Call an ambulance!" shouted Higginbotham.

"The lady where I got the water is attending to that."

replied the efficient Cathcart. Then, "My God! We've forgotten the model!"

We turned toward the laboratory, as one man, but the building by now was a mass of flames. The precious apparatus was beyond recall. Then the ambulance arrived, closely followed by the fire engines.

Joyce and Birkhoff rode to the hospital, with the patient, to try to learn his dying secret; while Higginbotham, Cathcart and I remained behind, to try and rescue something from the flames.

But neither group of us succeeded. Conrad Hughes died without regaining consciousness, and not an identifiable bit of apparatus could be found in the ruins of his laboratory.

To this day Professor Joyce maintains that the little airship must have been a fake, and that degrading it is "contrary to nature," and hence impossible. \* But Dr. Birkhoff and I believe that Conrad Hughes was on the right track.

THE END



In this department we shall discuss, every month, topics of interest to readers. The editors invite correspondence on all subjects directly or indirectly related to the stories appearing in this magazine. In case a special personal answer is required, a nominal fee of 25c to cover time and postage is required.

#### A LETTER TOO GOOD TO KEEP ANOTHER THREE MONTHS

Editor, AMAZING STORIES:

Again I shall take the liberty of making a few comments on the stories in our magazine. It is apparently, at least, a great medium for clearance of ideas—scientific or otherwise.

I have just finished reading the Fall edition. By far the best story in it was "Seeds of Life," by Taine. This story came nearer being scientific than any of the others. Now a few words about the alleged events that took place. First, the theme is O. K. Second, while it has never been proved that the effect of extremely hard rays on animal organisms would be a change of evolutionary progress one way or the other, still this fact does not prove that it might not. Third, it is granted that all present animal life has evolved from the reptile, etc., but if, as Mr. Taine has supposed in the story, the effect of the rays would in general result in the turning back of evolutionary progress, why stop at the reptile stage? As surely as the higher animals have evolved from the reptile, the reptile has in turn evolved from still lower forms down to the primary monera. Why then does not Mr. Taine make his parental reproductions reach the moneral stage instead of merely the reptilian? Surely it would not require any more imagination to do this—whether it would require any different kind or quality of rays or not—than it does to reduce future offspring to reptiles.

It is admitted that enough of the proper sort of rays would probably sterilize animal organisms, if the animals were to be exposed to the rays. Again it appears that Mr. Taine supposes—though he does not say so—that evolution is merely a mechanical or chemical process, to be advanced or retarded at will. Now, if we examine the works of the better known and most authoritative biologists, we will discover that evolution as the theory of evolution is founded on universal natural laws. It is a logical necessity for organisms to evolve into an advanced form of life. Evolution is the result of an instinct, concomitant with the instinct of self-preservation.

The former Dr. Hudson in his admirable work, entitled "The Divine Pedigree of Man," points out what should now be almost self-evident

to thinking people. He says: "This instinct, broadly speaking, is the impulse toward improvement as distinguished from the impulse to preserve. In the lower animals it was expended largely in the improvement of physical structure as a means of ameliorating the conditions of environment. In man it lies at the root of all efforts toward improvement and progress in every department of human activity. It is, in short, that constant, impulsive force or energy which renders every normal human being unsatisfied with present conditions."

Of course the fact that Dr. Hudson said the above, able though he may have been, does not prove the case. However, when we examine the writings of other equally high authorities and find that they agree on most of the essentials, the idea assumes an air of probability that it did not have at first. I have greatly admired the writings of Messieurs Darwin, Haeckel, Romanes, Huxley, Lamarck, Osborn, Lull, and many other of the able and painstaking investigators. However, these men are accepted as authorities for facts not theories. Their theories do not altogether agree, but their facts agree in every particular.

Now if Mr. Darwin and Mr. Haeckel and some others were right, that evolution was and is due solely to chance variation or to mechanical or chemical causes, then it would seem logical to suppose that by varying the physical condition of the reproductive organs or changing the chemical composition of the fluids therein, it might be possible to cause an advance or recession of evolutionary progress.

If one who is genuinely interested in the subject studies the various writings on the subject and reasons logically on the necessary outcome or causes of the known laws of nature pertaining to evolution, he will surely arrive at the conclusion that evolution is the result of an instinct that is as logical and necessary as the instinct of self-preservation. If this is not true, then we know as little of the causes or purpose of evolution as was known in the time of Aristotle. If, on the other hand, it is true, we can account for all the known facts pertaining to the subject and predict the ultimate outcome of the process for eternity. Furthermore, having decided that evolution is the result of instinct, we can readily see that its advancement or re-

tardation is out of reach of any material processes no matter how complex.

If my reasoning is faulty, if I am wrong in this, I should like it very much if someone would explain where I am wrong and what the truth really is.

For the other stories, they were good as fiction but hardly scientific. I don't see much of Dr. Keller's work any more nor that of Wells, Campbell and some of the other former writers. What is the matter?

"The Demons of Rhadi-Mu," by Dr. Breuer, is excellent. There is nothing inherently impossible in the story. Let us have some more like that.

I find nothing wrong with the illustrations, though some of the illustrations are inconsistent with the story, viz: the illustration of the "bird-men" in "The War of the Universe." The story describes them as birds resembling eagles, with a twelve-foot wing spread, while the picture of the birds makes them look like vultures not over three feet high and with not over a six-foot wing spread.

One more thing. I object to the use of the term "Telepathy" as used by Mr. Skidmore. Either Mr. Skidmore does not understand the powers and limitations of telepathy or he deliberately distorts them out of all proportion. The faculty of telepathy is NOT NORMAL TO THE OBJECTIVE MIND. It is a faculty of the human soul. It is only abnormal people or people in an abnormal mental condition that can communicate by means of telepathy. It is not intended for use in this world. If it was so intended, nature would have made it a normal means of communication.

If Mr. Skidmore disagrees with me on this and can show me where I am wrong, I shall be more than glad to admit my mistake.

Charles L. Campbell,  
Detachment O. M. C.,  
Presidio, San Francisco.

(We are certainly gratified about what you say of Mr. Taine's story in our Quarterly Fall edition. It is also very interesting to read what you say about evolution, but there is not the least doubt in our minds that evolution will be

(Continued on page 1144)

# The Light from Infinity

By L. A. Eshbach

(Continued from page 1109)

backward until he broke! "That's for Craig!" he exclaimed. Then he returned to Norcott.

The latter, so diminutive when compared with his giant friend, was waiting. Kennard reached down and grasped him, and leaped with him through the portal. Placing him on the floor, he turned to the machine, and caused the wall to assume its normal solidity again.

They waited a few moments while the air in the vehicle was being automatically replenished; then they removed their helmets.

Norcott's face was a study. Wonder, unbelief and gladness fought for possession of his countenance. But for the moment Kennard was more concerned with another matter than he was about the man he had rescued.

"Where's the other Red-man?" he asked in a voice that, to Norcott, was heavy and booming.

The answer drifted up to him in a high treble. "He's dead. When you and Craig escaped in the vehicle, you crashed into him. But say—" He stopped short when Kennard raised a silencing hand.

"Just a minute, Dave. Here, help me to get small." He gave Norcott directions concerning the manipulation of the diminishing ray. "Be careful," he admonished, finally. "I don't want to shrink out of sight."

The careful turning of a notched disc; a conical ray leaping out toward Kennard; a slow shrinking—and he was back to his normal, six-foot height. And, because of the slowness of the transition, Kennard, though dazed, had retained his senses.

"By gad, John," Norcott exclaimed, "I'm glad to see you—how glad I can't tell you; you came when you were most needed. I couldn't have kept that dodging game forever. But say, where's Craig? What happened? Where have you been all this time?"

Starting with their involuntary flight across the moon, Kennard told the entire story. Norcott listened intently, interrupting only once to speak regretful comment on Craig's sacrifice. When Kennard concluded, he asked of Norcott: "How about yourself? What happened to you?"

"Nothing much," came the reply. "In fact, nothing, compared with your adventure. When you and Craig vanished in this car, I doubled my efforts to cut off the ray. It was all to no avail—effort wasted. I couldn't do a thing with it, so I turned and fled. Then a moment later the surviving Red-man caught me. I suppose it was his first intention to kill me, but for some reason he didn't do so.

"I knew why in a short time. He had a better revenge in mind. Carrying me with him, he went to the machine on Tycho's rim. In some way he adjusted the device; then we left it. And by and by, I saw that the face of the earth was changing—growing larger, drawing closer

to the moon. His revenge was to be my watching earth's rapid approach, knowing that eventually a terrible collision must take place, and that all life would be destroyed. It was a diabolic idea, utterly inhuman—destroying a world for revenge on three men!

"Nothing happened for the next few terrestrial days, except that we made our way across the moon to the *Rocket* to live therein. Neither of us had food or water; the *Rocket* contained both.

"And then, a short while ago, I believe the Red-man decided to put me out of the way. We were seated in the projectile, when without warning he sprang toward me. I tripped him up; and while he sought to untangle himself, I eluded him and managed to get out of the *Rocket*. Then began that queer fight in which you took part at the crucial moment. . . . And now—what?"

"And now," Kennard concluded, "we're going back to earth!" He moved toward the huge machine that operated the vehicle—and paused. "But I don't think we'll go in this vehicle. The machinery's too big, for one thing; I don't believe I could operate it. Besides, a strange machine might create havoc on earth; interplanetary invaders, you know. I hate to leave this, but I guess if it's navigable, we'll return in the *Rocket*. Later on, if we want to, we can return to the moon, and perhaps take the *Supra-world* vehicle to earth."

"We'll have to do some repairing before we can use the *Rocket*," Norcott informed him. "The Red-man repaired it in part in order to make it safe to live in, but I wouldn't take a chance on a flight through space as it is at present."

"Very well then, let's get busy!"

\* \* \*

About forty-eight hours later, the *Rocket* was ready; with a stream of yellow fire roaring from her base, she hurtled out into the void. She was headed toward the earth, bearing the returning pioneers of space—homeward bound from the first space-ship's maiden voyage.

But where three had gone out, only two were returning. The third had exiled himself in a *Supra-world* of largeness unfathomable, sacrificing himself that countless others might live. And the two who were returning were saddened by the knowledge of the loss they had sustained.

On through space they continued until the earth sprang up to meet them; and with their voyaging done, they came to rest.

To an eager, wondering world they told their story, then—the story of the Light from Infinity. Then they, too, joined in the gigantic task of humanity, the wresting of earth's civilization from the chaos of destruction that the Light had left.

THE END

# In the Realm of Books

## From the Pen of Burroughs

"Tarzan the Inevitable," by Edgar Rice Burroughs. Published by Edgar Rice Burroughs, Inc., Tarzana, Calif. \$2.00.

THE incredible success of his Tarzan books undoubtedly led Mr. Burroughs into the publishing business. There is no question about it; Tarzan has become a popular character in that type of literature.

The present story was published serially in a well-known magazine, which takes the most popular tint of the sky as its descriptive name.

The book itself presents Tarzan in all his wild glory. The Tarzan fan meets many of his old animal friends, which have been personified by words taken from a negro language. Tarzan has any number of narrow escapes, the ones from Opar are particularly thrilling; he also blasts the nefarious schemes of a gang of "Reds" which needs the treasures of Opar for a private World War, etc., etc., etc.

It would be difficult to give a clear synopsis of all that is happening in this book, and, anyhow that would spoil it for the Tarzan fans to whom the book is heartily recommended.—C. A. Brandt.

## Two German Books

"Einfall in London," by Frank F. Braun. Published by Arthur Cassirer, Berlin, Germany, 232 pages. 2 Goldmarks.

ACCORDING to the blurb on the jacket this book has "a gigantic theme," but most of us have learned not to take these statements too seriously. The most that could be said for it is that it is just mildly interesting.

The theme of the book is the discovery of steel and iron destroying radio waves. Five adventurers armed with such wave generating apparatus land in England and proceed to destroy Woolwich Arsenal, the Bank of England, etc. The

idea is to demonstrate the total futility of all wars and after having convinced the British Government, the inventor intends to give his invention to the world in general, thereby hoping to abolish all wars.

If this theme had been carried out logically, the book would have been worth while, but as it is, the idea flops with an audible thump and the book becomes a welter of irrelevant detail.—C. A. Brandt.

"Das Experiment des Dr. Tintclott," by Roland Betsch. Published by "Verlag Scherl," Berlin, Germany. 227 pages. 2 Goldmarks.

THE notice appearing in the weekly publication "Die Woche," praised this book as a notable achievement.

Most of the notices about new books usually do and in time one gets case-hardened and less disappointed in the exaggerations of the publicity department.

The idea of the story is that Dr. Tintclott operates on the brains of an animal loving tramp and an East Indian half-breed woman to give them the ability to read other people's thoughts.

The operation is a success, but the two "operates" don't think much of it, as they constantly get into trouble.

Now, in order to get the necessary pages together to make a book, the poor reader is dragged all over the globe and the idea of the book loses itself completely in a mass of totally irrelevant details which are of no particular value and interest.—C. A. Brandt.

## "Cruelty to Words"

"Cruelty to Words," by Ernest Weekley. Published by E. P. Dutton and Company, Inc., New York City, N. Y. \$1.00.

THIS very neat little book is written in a literary sense. It is not a collection of "howlers," but reads consecutively as a treatise on good writing.

One interesting statement made by the author is to the effect that he finds "linguistic absurdities" perpetuated, not so much from the purely grammatical point of view as from that of common sense.

He starts, first with the rather sad reflection that the literature from the press becomes each year more voluminous, more turbid and more turgid and he has come to the conclusion that today's English is bad, that tomorrow's will be worse, and that the day after tomorrow's will be pretty nearly hopeless.

One interesting point that he makes at the beginning is that highly educated men write poor English. He gives three or four curious illustrations of utterly bad composition—one from a University Professor, another from a great man of science and one from a political theorist, but takes good care not to give names. He takes up the proofreader and claims that the good ones are still extant. It is impossible in the space at our disposal to give anything like a full review, but the book is thoroughly well worth reading and rereading. There is one curious thing about it; the erroneous quotations run so smoothly that there would be great danger of passing them over in editing a text containing them. Quite a bit is devoted to "whom" and "him." Throughout, the names of individuals, with few exceptions such as Shakespeare, are not given, so that the work has no touch of personality about it. Several pages are devoted to the split infinitive which is rather unfashionable now. Lord Byron, it seems, has been called the father of the split infinitive—he used it so much. There are some rather interesting notes on the use of the hyphen and comma. We may say in conclusion that it is a matter of surprise how much good material is contained in these 94 small pages. The flavor of the text impresses one as decidedly English, and for some reason that flavor seems to impart a sort of authoritative standing, and a suggestion of solid thinking on the part of the writer.

—T. O'Connor Sloane, Ph.D.

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# I Waked Twice Across the Continent to Shake Hands with George F. Jowett

By Ed Quigley

Whenever I saw a well-muscled strong-man do his stuff my heart would always ache with desire. Above all things in the world I craved to be strong and to have a big chest, broad shoulders and a pair of powerfully muscled arms.

On this particular occasion I sat upon a rail fence on my father's farm and I felt unusually downhearted. A piece of paper blew across the road, and as it clung to the fence post I saw imprinted upon it the figure of a powerfully developed man. Eagerly I leaped from my seat and grabbed it, and for hours I gazed upon that magnificent form with devouring eyes. Coming back to realities it was what plunged me into my unusual state of downheartedness. I asked myself, "What chance have I, a tall, lanky youth, of ever becoming as powerfully developed and as strong as the man in the picture. Here I am on an Oklahoma farm without even a chance of seeing or talking with such a man to learn the secret of getting strong."

Then an inspiration came to me. I would write to him—better still I would go to see him. I had no money but in the enthusiasm of my decision that did not worry me. I felt that I must see him. He had once been a weakling and knew what it was to have an unutterable ache in the heart to be strong. He would understand, I was positive. I started out on my long bike from Oklahoma to Pennsylvania with all my worldly possessions wrapped up in a small bundle—a clean shirt, tooth brush, and a one dollar bill.

I walked and bitch-hiked all the way east only stopping at one place long enough to work until I got the price of a pair of new shoes. I had worn the old shoes out in my long trek. Finally the day came when I reached the city of Scranton where this famous athlete-teacher is located. It was raining hard but my heart beat with anticipation only to be doomed with disappointment. The man I had hiked across the continent to see was out of town, but I was told that if I cared to go on to Philadelphia a wire would be sent him to wait for me. Gee, I was tickled to death. I got a hitch ride all the way through and bright and early presented myself at the Philadelphia address. Never will I forget my first sight of that man. Such shoulders. They seemed to overflow the chair in which he sat. His neck was powerful and supple—his chest broad and deep—and such arms! I thought they would burst the sleeves. Gee! but that was a happy day for me. He was wonderful. He loaded me down with valuable advice, carefully explaining how I should begin my training and how to change my method of training as I got stronger.

I left Philadelphia on my hike back to Oklahoma with a new song in my heart. When I got home I started right away to put into practice all he had told me. Day by day I could see my muscles grow, and my strength increased at a wonderful rate. By the following year I was marvelously improved, and I determined on another hike across the continent to see my famous friend, ideal and teacher. He was as glad to

see my physical improvement as I was to show it to him. He told me he knew I would make good because a fellow who really wants a thing bad enough will go out and get it in spite of all.

Gee, fellows, I wish you could all see the wonderful muscles I built for myself and the great strength that each muscle has. I wish you could have the same grand experience I had, but you can if you want. It is simply a matter of wanting a well-developed body and starting out right to get it.

I walked four times across the continent to see this great teacher and it was the best thing that I ever did. Some day I am going to be famous and every bit as strong as my ideal is. He said it was quite possible. I can't help but win, and with the wonderful start I now have with my well-developed body I am going to lick the world. So can you. It makes no difference whether you live on a farm or in the city; today the fellow in the country has an even better chance than the city chap. I know it. The whole thing is to determine you want a well-developed body with muscles of steel and you will get them. You can have health, strength, success, and a body that will make you the pride and envy of everyone.

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## REGARDING THE LOST ATLANTIS

**Editor, AMAZING STORIES:**  
The letter of R. G. Lyle of Brantford, England, has inspired me to write this. Although I have always thought I had nothing in common with the English, it seems that possibly I have been mistaken if this letter expresses English sentiment in general. I, too, prefer not to criticize the truth of scientific data, as set forth in *AMAZING STORIES*, too closely, because in all fiction it is necessary to stretch the truth a bit to make a good story. You notice I say "good"; I will bring out that hidden reference to full view by saying that *AMAZING STORIES* are better than that and more. Of course I could criticize nearly every one of them by mentioning the things that appeal to me and the things that don't, but to some one else these would appear most commendable and I would appear foolish to them, which is only human nature again. It would be a good idea for all readers who write in to express their opinions and then stand by them, so making for the enjoyment of all.

Another thing I'd like to mention before I get back to routine office work. Give all encouragement to people who have hits of inspiration, such as appeared in the "column" in the December issue, written by Mr. Kenton of Cleveland, Ohio. His information, plentiful and compact, certainly gave me a start. I was aware that anything of such successful import had been brought to light regarding lost Atlantis. Such bits of information along all imaginable lines certainly tend to keep the mind open to discovery. Your materials are most useful as a stimulant along this line. Excuse me for even intimating such a thing as this, but I hope you are always exact to the 5th degree in your editorials because I base a lot of arguments along the lines as laid down by them, and I would certainly lose faith in the ability of the A. S. staff if I was caught up through such an error.

Keep the old MAGGING and I for one will trust to your judgment for good reading material from month to month. Even though I know I won't like some of them, I'll read them anyway, because I'd hate to be left out of anything.

John A. Cotterman,  
1038 Fillmore Ave.,  
Buffalo, N. Y.

(In the opening sentences of your letter you make the very obvious remark that the truth has been stretched a bit sometimes to make a good story. There is any quantity of stretching about Atlantis and the Pacific Ocean continent which is supposed to have disappeared. There has been a lot of poetry and romance based on this legend. As regards the exactness of the story in our edition, you will find a letter in a column of the "Discussions" finding fault with the etymology of the names of the ores of the metal tungsten now so extensively used for incandescent lamps. We entirely disagree with the author of the letter in question. We have seen various origins of the word "Wolfram" but none of them appears satisfactory and Webster's rendering of the relation as "wolf root" seems about as poor as any of the others. Tungsten, however, means one thing and one thing only. We certainly want to keep right on giving you good reading, but we will probably be forever exposed to criticism. Editor.)

## A YOUNG CANDIDATE FOR THE SCIENCE CORRESPONDENCE CLUB

**Editor, AMAZING STORIES:**

I have just finished the January issue of *AMAZING STORIES* and I would like to get some thing off my mind. How could the people of the under-world expect to conquer the powerful Shels? I think the Shels were superior in aim and could easily suppress the semi-savages of the lower-world.

By the way, could a boy of 13 years join the Science Correspondence Club? I would like to know about it.

Walter Kubilis,  
395 Lorain Street,  
Brooklyn, N. Y.

(Your first question is hardly to be answered. The story is entirely fictitious and sometimes in contents in this world the little fellow comes out ahead. We are sure that the Correspondence Club will be delighted to have you as a member, but in your application or write for particulars.—Editor.)

## A MOST AMUSING LETTER FROM ENGLAND CRITICIZING DR. SMITH'S CONVERSATIONAL SLANG

**Editor, AMAZING STORIES:**

CRASH! Sorry, I fear my gauntlet has made rather a mess of your floor. I hereby challenge you to publish this letter. In the past you, as a confirmed devotee of *AMAZING STORIES*, which is undoubtedly the best production of its kind, I feel that I am entitled to air my views in your Discussion Columns.

Although many will probably disagree violently with me, I consider that of all the brilliant array of authors whose efforts appear in your pages, the two most outstanding figures are Campbell and Edward E. Smith.

Kindly note the juxtaposition of these names. Pause, while I travel at 59 times the speed of light. I will now proceed to interview these men of genius. The air is somewhat rarefied on these Olympian heights, however, what other mere mortals have achieved, should not be beyond my feeble powers. "Good afternoon, Mr. Campbell. To you despite those small insignificant lapses resulting in those arid pages which savour so strongly of the text-book, I award pride of place." I ram down upon Mr. C's head, intellectual brow (in Mr. Editor's) the laurels, despite the passionate cries of protest from Dr. Smith. "Dr. Smith I presume." Yeah ace, All X. "Smatter? For Cat's sake why please, Dr. Smith. I am speaking on behalf of posterity. It is my hope, with these few timely words, to prevail upon you to alter your ways so that your name may be recorded on the tablets within the Temple of Literature." Dr. S. "All X ace. I check you to 19 decimal places. But Wow, great Balls of Fire, Zowie, sweet spirits of niter, great cat, may I be kicked to death by little red spiders, if—" "Pardon me, Dr. Smith. It is with much deference to these comical appearance of these very phrases (if one may dignify them with such a term) in your works that I wish to plead with you. They are not consistent with good English or—" Dr. S. "Bounce back ace, you've hit a rubber ball. There's one more huddle due yet out of the old think tank. I've explained the reason why Seaton uses—" But can you explain, Dr. Smith, how it is that out of all the heterogeneous 'Gangs' (to use a very favourite word of yours) of interplanetary races, who are taught our language my means of the mechanical educator, not a single one of the Seaton races is mentioned in his conversation? Further, do you realize the appalling monotony, from an intelligent reader's point of view, of your frankly wearisome repetitions. The ever-recurring "yeah," "hope," "dope," "smatter," "right," "right," "right," "what say," and so on *ad nauseam*. Please scrap your list of stock phrases Mr. Smith. You have no idea how I dread the words. You chirped it, or you're a blinding flash and a deafening report! which appear, together with other examples too numerous to mention, with the most exasperating regularity in all your stories. For one thing I must thank you, however ever. "O. K. Chief" has only appeared once, and so far we have been spared from "Sez you!" "Dr. S. "Ace, you're all screwy. You're bailed up. May I be broken right off at the ankle if—" "And Dr. Smith, I should take it as a personal favour if you cease to employ that most loathsome of alleged love-terms "Cuddle-pup." Finally I will now make a confession. If you do not amend your ways, Dr. Smith, I shall still be compelled to read your stories, pausing every two minutes to bite someone as I come across one of your stock phrases for the umpteenth time. Having now taken my leave upon your mercy, I implore you to have pity on one at least of your readers." D. S. "For Cat's sake I'll dope this out, ace, or I'm a polyp—" "PLEASE RE. SMITH" D. S. "Oh, well, all ace." "Sall right. But may I be kicked to death by little red spiders."

Certain, amidst a blinding flash and a deafening report, of excess, receding gradually into the distance, I thank you joyfully.

Oliver Kobb (Miss.)  
80 Winstanley Road,  
Waterloo, Liverpool,  
England.

(We accept your challenge, though we did not need to be challenged. Unless we are very much mistaken, and that would be impossible—well, almost impossible, anyway—Mr. Smith will have a word or two to say about your fireworks. How about it, Dr. Smith?—Editor.)



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### A LETTER WHICH IS A COMFORTER TO THE EDITOR

Editor, AMAZING STORIES:

A number of times before you said that the Discussion Section wouldn't be a success unless there were a few hot and stinging brick-bats to flavor it up. *Vous avez raison.* There is no doubt about it. It's the only thing that can stimulate me into the big job of writing a printable letter. I sure is swell to be able to get at least one good laugh out of the "Free for All" part of your (or our) magazine. I read B. J. Keaton's long but very interesting letter on the question of the two lost continents, Mu and Atlantis. I read Dodson's tribute to Smith, (and agree). I read a letter from Scotland, a number of criticisms of "Submicroscopic," etc., etc., and then, almost the last of them all, what I was looking for... an excuse to move my cramped legs and arms and have out a prolonged guffaw. Namely, Stanley Branch's most enlightening brick-bat. His criticism of Burroughs reminds me of the goofs that go around with their pockets turned inside out, their thumbs in their ears and point at that big block of granite laboring in the national capital. Why do you suppose Branch has spent money for *AMAZING STORIES* for years if it wasn't for enjoyment? Why did he go through such a disagreeable task as to wade through Burroughs' "dry, vulgar and driving" tale of Mars? To get his character to Mars, Burroughs merely exaggerated the prevailing theory of the supremacy of mind over matter. If an author exaggerates in his fiction to attain an end, is that being vulgar and driving? True, some of the antics Burroughs has his characters perform are enough to bring a smile to the face, but as far as being disgusting is concerned, there are hundreds of authors that have him beat by a mile. Another thing, it's a cinch that if a person is able to recall details of a magazine story he read four years in the past, that story has something about it that is good.

If Branch should go over that part about the mysterious colors of Mars, he will find that he has been losing sleep over something he couldn't grasp. It is common knowledge that a thing can't be described unless there is something else with which to compare it.

In Branch's letter, he said, "I think you ought to change your name to *Scientific Fiction Stories*." And then, in his praise of "Rice's Ray" (which I have read and enjoyed) he said, "Rice's Ray is not scientific—it is literature!"

He wants literature, and yet he wants you to change the name of the magazine to *Scientific Fiction Stories*.

Allen Spoolman,  
613 4th Avenue W.,  
Ashland, Wis.

(We think you are rather hard on Mr. Branch. This is the second attack that the poor man has received recently, but we put it in and hope he'll come back with another letter. You must remember that we have published many unfavorable criticisms of our editorial policy so it seems that there is no harm in an author getting a little of the unfavorable criticisms that fall upon the shoulders of the poor editor. When anybody says "I am doing my best, sir," look out, for trouble is pretty sure to be impending. To avoid such trouble, we try to run our magazine to please the intelligent contributors to the "Discussions" columns, as well as those whose letters, for want of space in the magazine, have to remain unpublished.—Editor.)

### AN ENCOURAGING LETTER

Editor, AMAZING STORIES:

I have been a reader of *AMAZING STORIES* since its inception. I have with very (very few) exceptions enjoyed every story. The cover is always good, and your artists are fine. The only fault I can find is that there are not enough of their drawings in our magazine.

In the last few issues a few correspondents have requested back copies. Now I have every issue since August, 1928, and if anyone desires any copies, I can supply same.

I would like a reprint of the "Moon Pool," but I suppose this is impossible.

John A. Fleming,  
148 Clinton Avenue,  
Brooklyn, N. Y.

(As we publish some very critical and unfavorable letters, we feel that we are entitled to put in such a one as this, too.—Editor.)

### A TONIC LETTER—BUT WE ARE GLAD TO TALK SOME OF OUR STORIES

Editor, AMAZING STORIES:

I just finished reading the current issue of *AMAZING STORIES*. This is the first time I have written to you or any other magazine, so please make no comment on the quality of my letter.

In this issue I like "The Lemurian Documents." It was a story that held the interest of the reader. It did not go into too much scientific detail, but it was a good story. I like your stories do, and, above all, the tale was well written.

I did not like the story "Power." "The Inevitable Conflict" put me to sleep. I had not read "Tusnahk" or "The Bellhop." (Sounds like the story of a bell-hop.) I like most of your interplanetary stories, but as Bernard Buridan says, some of them are a bit too fantastic and told in a way that seems as though the author has done it himself a dozen times.

R. C. Yost of Baltimore would have to experiment with various magnets. I have one which I made by wrapping a 1½-inch diameter iron wire, 10 inches long, with about 500 turns of No. 14 enameled wire. This is O. K. for 110 volts.

L. C. O's cross section is O. K. I also find that the people that raise A. S. the most never read it and, after they read one copy, they come back for more. I was the same.

Sometimes your magazine is rotten, but I think that it still is above the average.

Where is this "Atlantis" supposed to be? Is there any definite proof it ever existed?

Chas. Schwarzkopf, Jr.,  
2560 W. 15th Ave.,  
Philadelphia, Pa.

(Your letter is a tonic for an editor. You will find that the hero of the Corridors is anything but a bell-hop. Would you not consider, as regards interplanetary stories, that if they read as though the author had done the things a dozen times, they would be considered all the better?)

Your remark about people who do not appreciate *AMAZING STORIES*, not being readers of it, is quite striking. We do believe that you really think our magazine is ever "rotten" and as regards Atlantis, people seem very anxious to prove that it did exist, but that they are having a sad time in doing so.—Editor.)

### A PLEASANT LETTER FROM ONE OF OUR YOUNGER READERS. WE LIKE BOYS.

Editor, AMAZING STORIES:

I happened to be reading the Discussions Columns of the January, 1931 A. S. and came upon a letter of Isidor Manzoni. I was actually surprised. He criticized your authors "something terrible," employing every adjective in the book for using the same old plots, ideas and murderous scientists in their truly wonderful stories and then had the nerve to ask for reprints by Wells and Verne. There was only one redeeming feature and that was when he praised the masterpieces by Ed E. Smith, Ph.D., the "Skylark of Space" and "Skylark Three." I second Wayne D. Bray in wanting you to publish in book form "The Face in the Abyss" and "The Skylark of Space" and numerous others. Why? oh why! can't your readers understand that in Solarite the kaxorian bombs were little knots of this light energy? And hence would go right through an invisible object while solid material such as luminous paint must certainly would not. In the July, 1931, issue, E. M. Stanton was correct in his criticism of the method of getting to the moon in "The Annexation of the Moon" (Feb., 1931). In "Skylark Three" it says that the "Zone of Force" is impervious to the attractors and the power bar, yet he throws the zone about the Skylark and then it suddenly turns and blows the directions of the object-compass back home. Wouldn't the "Zone" so neutralize the compass that when it (the Zone) was turned off the compass would be the next thing in line with its bar or needle?

P. S.—I am 14 years of age and have just graduated from grammar school.

Jack W. Thordson,  
46 East 27th Street,  
Portland, Oregon.

(We must say that we consider this letter quite an admirable production for so young a writer.

We edit and correct everything that goes into the magazine. Your letter shows an absolute minimum of corrections. We hope you will keep up the good work.—Editor.)



## DRAWING THE LINE ON DETECTIVE STORIES

Editor, AMAZING STORIES:  
Having read your wonderful magazine for a little more than two years, I feel qualified for writing you some "kicks" and some compliments.

I find your "Discussions" department as interesting and educational as many of your stories, although some of the letters are radical in content. I do not see where there is any reason for criticism in the size, paper, cover, name, etc., of AMAZING STORIES, except that it ought to be made larger as a whole, much larger. But some of the stories were not so good, such as "The Master of Mystery." You claim your magazine to be strictly concerned with science, not detective fiction. And the "Time Hoaxers" was only a bore, perhaps because of the author's relentless attention to unimportant details.

On the other hand, there have been some veritable masterpieces. Dr. Smith's "Spacehounds of IPC," for instance. The technicalities therein were very plausible, and I read the story over three times in order to get all of it. Then again, as many of your readers write in, when the hero of "Submicroscopic," by Captain McK, reduced himself to the state where he arrived on an electron, he would surely have been correspondingly very heavy, because his person was still composed of the same number of atoms. But nevertheless the story, written in its good style, was interesting to read.

The stories of interplanetary and interstellar travel, although highly imaginative for the present day, compose the best parts of your publication. "The Stars from the Green" was a great piece of work of this type and "Pirates of Space" and "Sky Cops," in your December issue, were likewise above par. Especially "Sky Cops," by Hart Vincent and Charles Royce. Here's hoping that that team will get together again and produce another story similar to their last, but infinitely longer. "Sky Cops" was all too short.

To be ending, I must congratulate you for producing the all-around, in my opinion, best magazine sold on the newsstands. Keep up the good work.

Richard Hayden,  
4152 N. Kilbuck Avenue,  
Chicago, Ill.

We are delighted to understand that you enjoy and appreciate our "Discussions" department. AMAZING STORIES is by no means a small magazine. We do not feel that a detective story should be excluded from our columns, provided it contains science; the use of a mass of hard carbon dioxide that would fracture a man's skull and then to evaporate as gas impressed us as being extremely clever. The possibility of doing this was investigated by us before the story was published, and we received high authorization for its possibility. The story was well told and seemed to us more science fiction than detective fiction.—EDITOR.)

## A NICE LETTER FROM A YOUNG CONTRIBUTOR

Editor, AMAZING STORIES:

Although I have written to you before I can't help but write to you again to express my love for a few compliments and brickbats that have been simmering in me for some time. I am fifteen years old and have been reading A. S. for some time, almost since the first issue, and I have enjoyed it immensely. I have only a few complaints to make.

From memory I met pass opinion on some stories of back issues. "Television Hill" was a very interesting story and I hope that it will have a sequel soon. "The Purple Plague" was also very interesting. "The Drums of Tapajós" was one of the best stories that I have ever read in A. S. I hope that there will be a sequel to it as I have been wondering what became of the characters since I read the story.

For the first and last time let me say that I most certainly did not like the "Skylark" stories. The characters in them were poor dumb creatures compared with the other forms of life met with in the story, learned almost all the scientific secrets and facts of a much further advanced science than ours as soon as they were given the chance. That is why I didn't like it and why I'm giving it a big long "thumbs-down."

I like the size and paper of A. S., but I think that if the name were changed to Sciencefiction that it would increase your sales. I get badly "tired" for reading "modern" science fiction. That is what some of my friends call it. A. S.

Let me say that I have never read a QUARANTINE that I enjoyed as much as the interplanetary one of some time ago. Also let me say that I have never read one that I disliked as much as the latest one. When it comes to AMAZING STORIES they were certainly that, but when it comes to identification they were certainly not that. The only stories in the complete issue that I considered worth reading were "The Cosmic Menace" and "The Blue Barbarians" and I didn't enjoy them. I think the last named would have been good if the silly part about glass money had been left out.

I have just finished reading the latest monthly and this is how I class the stories:

"The Master of Mystery" good, as most of Capt. McK's stories.

"The Arhenius Horror" terrible.

"The Lunar Chrysalis" fair.

"Spacehounds of IPC" the ending wasn't as good as the rest.

Quite a bit of discussion has been done over love in the stories. I think a little love in the plot helps, but too much ruins it.

"Discussions" department a great deal and I have made a number of friends through it, as I write to nearly all boys and girls of my age whose letters I see published.

I hope to hear from A. S. to please and put it back together again, all by mail.

Also I have joined a scientific club that is for the purpose of stimulating interest in science, through Discussions. I will gladly tell anyone about this club that wishes to know if they will write.

After all these brickbats, etc., let me say that I enjoy A. S. more than any other mag. on the market and find myself a few complaints to make in a few issues.

I hope that you will pardon these observations by one so young.

James H. Logan,

Altamont Apt. 33,

Charlotteville, Va.

(This is a nice letter from a young reader and the fact that he reads AMAZING STORIES with attention and understanding is shown by the fact that he has some compliments and brickbats from the sequel of "The Drums of Tapajós," which certainly was a very beautiful story and "Television Hill." This strange and rather tragic ending of the latter won much praise from our readers.)

The fact that we cannot please everybody is shown in your note. Hiking the "Skylark" stories. In them we seem to have met the public's taste most satisfactorily and yet you do not care for them.

To be certain, which you enjoyed so much was a question extent led up to by letters from readers who wanted interplanetary stories.

Do you think that glass money is much more silly than the present valuation placed on diamonds and rubies and other precious stones? One seems about as sensible as the other. In this part of the world we use paper money and some might think that worse than glass money. When you write later you will probably not be so definite and fix in your criticisms.

It is very pleasant to hear that you write to our friends in the Discussions Columns. We are glad to publish your letter.—EDITOR.)

## A PUZZLING QUESTION ABOUT THE ABSOLUTE ZERO IN SPACE

Editor, AMAZING STORIES:

I am again bringing up the question of space travel. This question has been discussed many times, but I have never been able to get a satisfactory answer. I would like your opinion. In space the temperature is absolute zero. The definition of matter is molecules in motion. Also all molecular motion ceases at absolute zero. Therefore when molecular motion ceases to exist, matter also ceases to exist. Am I right or am I wrong? It would be embarrassing for a space, would it not?

Edgar A. Blair, Jr.,  
1309 West Crawford Ave.,  
Connellsville, Penna.

(The question you take up is certainly a puzzling one. The absolute zero is a puzzle. It has been approached so closely that we cannot easily believe that the great scientists have come close to annihilating matter. As far as the story goes, it does not matter whether the absolute zero exists in space or not, for all that the stories require is intense cold, and that can undoubtedly be assumed to exist in space, but always modified by what we may term the radiations pervading space.—EDITOR.)



## Compare these Drawings

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Prepare for jobs as Designer, Inspector and Tester—as Radio Salesman and in Service and Installation Work—as Operator or Manager of a Broadcasting Station—as Wireless Operator on a Ship or Airplane, or in Talking Picture or Sound Work—HUNDREDS of OPPORTUNITIES for a real future in Radio!

## Ten Weeks of Shop Training

We don't teach by book study. We train you on a great outlay of Radio, Television and Sound equipment—on scores of modern Radio Receivers, huge Broadcasting equipment, the very latest and newest Television apparatus, Talking Picture and Sound Reproduction equipment, Code Practice equipment, etc. You don't need advanced education or previous experience. We give you—RIGHT HERE IN THE COYNE SHOPS—the actual practice and experience you'll need for your start in this great field. And because we cut out all useless theory and only give that which is necessary you get a practical training in 10 weeks.

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Dear Mr. Lewis:— Send me your Big Free Radio Book, and all details of your Special Offer.

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## Many Earn While Learning

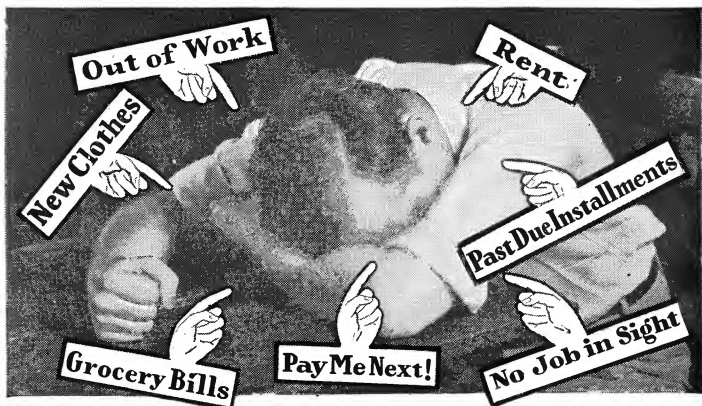
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# Are You Out of a Job?

THEN SEND ME YOUR NAME AND I'LL GIVE YOU AN AMAZING OPPORTUNITY TO

# Make \$15 a Day!

ARE you out of work or afraid of losing your job? Are you wondering where the money is coming from to pay your bills? Are you dissatisfied with being hard pressed for money every time there's a slack season? Are you tired of getting along without the things you need while somebody else has the luxuries?

Then you're the man or woman I'm looking for. I've got a good opening for you *right now*—a wonderful proposition that offers a chance to start right in making up to \$15 a day—full time or spare time—in pleasant, dignified work that will be a revelation to you.

And remember this. There are no slack seasons in my business. I'll never lay you off or fire you. With my proposition I'll guarantee you steady work as long as you want it!

## \$110 in a Week

This sounds too good to be true, I know. So I want you to send me your name so I can lay you a fine PROOF before you. That's all I ask. I'll show you how Sol Korenblit, of New York, took hold of my proposition and made \$110 in a

single week! H. L. Lennon writes, "After leaving my old job last Thursday, I went out Friday morning and made \$30.63 in 7½ hours." Mrs. Eva McCutchen, of Oklahoma, quit a \$10-a-week office job and made \$26.55 profit the very first day with my proposition. Mrs. Jewel Hackett, of Ohio, cleared \$33 in 7 hours—more than she formerly made in two whole weeks in a factory. I have *hundreds* of letters like this in my office. Of course some people make more than others. But these big earnings of a few of my Representatives show the wonderful possibilities. And right now, I am in a position to offer you a proposition *even better* than the one I gave these people!

## No Capital or Experience Needed

My offer is simply this. You act as my Authorized Representative in your locality—calling on your friends and my established customers—and taking care of their orders for my line of fast-selling Groceries, Toilet Preparations, Soaps and other Household Necessities. My plan is so easy and my instructions so simple that anyone can follow them. All

my customers in your locality *must* order from you because I *never sell through stores*. So you alone get the profits. I give you all the liberty and leeway anyone could ask for. You set your own hours and work as you please—full time or spare time. No one will be bossing you around. There will be no time clock to punch four times a day. There will be no slack seasons or layoffs. You can say good-bye to the constant fear of losing your job when you need money most.

## SEND NO MONEY

I don't want your money. All I want is a chance to lay the facts before you so you can see for yourself and decide for yourself. If you want a sure, steady chance to make \$15 a day—with an old, reliable, million-dollar manufacturing company—in business nearly a quarter of a century and noted for its fair, square dealings—then mail the coupon and see how easy it is to get started. There's no red tape or delay. You invest no money.

Earnings start at once. Don't miss this chance. It doesn't cost a penny to investigate. You can't lose by mailing the coupon, so do it today—**RIGHT NOW!**

## MAIL THIS NOW

Albert Mills, Pres., Zanol Products Co.,

32 Monmouth Ave., Cincinnati, Ohio.

I'm sick of short pay and late payoffs. Tell me about your plan that offers a sure, steady chance to make \$15 a day—starting at once. Also explain your FREE Ford Offer.

Name .....

Address .....

(c) Z. P. Co.

(Print or Write Plainly)





# AGENTS! SHARE THE PROFITS WITH ME ON THIS *NEWLY IMPROVED* TOM THUMB ELECTRIC WATER HEATER WHICH IS

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Underwriters Laboratories**

*Tell Housewives How They Can  
Get Instant Running Hot Water  
from Cold Water Faucet and  
make up to \$40<sup>00</sup> a Day!*



**KITCHEN**



**SHAVING**



**LIGHT WASHING**



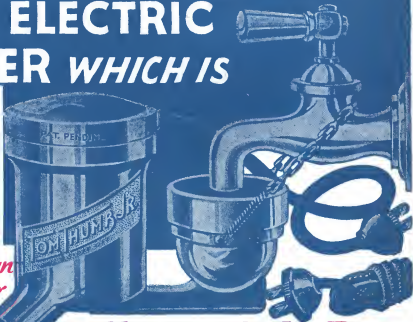
**DOCTOR**

Again Tom Thumb leads! The first and only portable electric water heater approved and listed and approved by Underwriters Laboratories to be absolutely safe and non-hazardous for 110 volts, a.c. Tell this story and show how by just plugging in at the nearest electric outlet it is possible to get instantaneous, continuous running hot water from any cold water faucet. When your customers see this joy this great convenience for only \$3.75, they will buy on sight demonstration. Price includes everything. Nothing else to buy — I furnish extra 5 ft. extension cord connector.

No installation expense — just stick it on the faucet and plug in on nearest electric outlet, ready for use.



**FACTORY**



**Sells For \$3<sup>75</sup> .. Pays  
You \$1<sup>00</sup> Clear Profit!**

Tom Thumb electric water heater has many uses and an unlimited market for sales. Costs you \$3.75. You collect \$1.00 deposit on every sale, which is your cash commission.

## No Installation—Stick On Faucet and Sale is Made

Tom Thumb doesn't have to be removed when hot water is not wanted. Easily detached and carried to any part of house where cold water is running and hot water is wanted. Made entirely of aluminum. Cannot rust—no moving parts. Unbreakable—nothing to get out of order. Do not be fooled by porcelain heaters which are easily breakable. Do not sell an unsafe heater which is not listed and approved by Underwriters Laboratories. Sell TOM THUMB. Fire authorities, insurance companies and even the police forbid the sale of an electric water heater unless it is listed and approved by Underwriters Laboratories. Stick a Tom Thumb on the faucet and tell the wonderful story about convenience, safety and low price and your sale is made.

## Rush Coupon If \$40.00 A Day Sounds Good to You

This new scientific sale invention offers tremendous sales possibilities. At low price of \$3.75 you should be able to sell at least 40 a day. Sign your name and address to coupon for additional facts, or, better still, get started selling and earning at once by attaching money order for \$2.75 to coupon and rush to me. I send complete selling outfit containing one Tom Thumb Electric water heater, 110 volts, order blanks, selling particulars and everything necessary to get you started earning at once.

**Harry A. Mitchell, President  
Terminal Products Co., Inc.,  
Dept. 503, 200 Hudson St., New York.**

The Tom Thumb electric water heater looks like a big money maker to me. I have checked below the proposition I am interested in at this moment.  
I Enclosed find money order for \$2.75. Please send me 1 Tom Thumb, 110 volts, order blanks and selling information. It is understood upon receipt of this sample outfit I will be permitted to take orders and collect \$1.00 cash deposit on every Tom Thumb I sell. It is also understood I will send orders to you and you will ship direct to customers C.O.D. for the balance, plus postage.

( ) I would like to have additional information before acting as one of your agents. Please send this by return mail free of obligation.

Name .....

Street .....

City ..... State .....

Canadians please send cash with order at same price (U. S. A. money). Other foreign countries \$1.00 extra for each unit cash with order.